DEPARTMENT OF ENERGY
FY 1998 CONGRESSIONAL BUDGET REQUEST
DEFENSE ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT
(Tabular dollars in thousands, narrative in whole dollars)

WASTE MANAGEMENT - DEFENSE

PROGRAM MISSION

For nearly five decades the Department of Energy (DOE) and its predecessors, the Energy Research and Development Administration, and the Atomic Energy Commission, have been generating radioactive waste from research and development activities. Those activities produced large quantities of waste, which was stored or disposed of in a manner that does not meet today's more stringent environmental, safety and health standards. Much of the stored waste contains radioactive materials, hazardous chemicals, or both.

MISSION STATEMENT

The mission of the Waste Management (WM) program is to protect people and the environment from the hazards of DOE waste by providing an effective and efficient system to store, treat, and dispose of the waste as soon as possible.

PROGRAM GOALS

The strategic GOALS of the Defense Waste Management program support the WM mission by:

1) Focusing on resolution of the most significant environmental risks;
2) Reducing mortgage and support costs to provide resources for further risk reductions;
3) Working in partnership with regulators and stakeholders to find new approaches to problems to reduce costs;
4) Overseeing on-going regulatory compliance activities to ensure DOE meets environmental, safety and health requirements; and
5) Integrating waste treatment and disposal across sites to maximize mission completion and cost reduction.

PROGRAM MISSION WASTE MANAGEMENT - DEFENSE (cont'd)

PERFORMANCE MEASURES

The Office of Waste Management plans to measure the success of its FY 1998 program in meeting the above goals primarily through treatment and disposal of waste, by the amount of DOE waste it treats, stores, and disposes, which reduces risk and cost (goals 1,2,5). The program will also continue to work with regulators, stakeholders, the Defense Nuclear Facilities Safety Board, and other Departmental organizations to maintain or improve compliance and reduce costs (goals 3 and 4).

Specific waste storage activities include:

1) Maintain safe and environmentally compliant storage of over 500,000 cubic meters (m^3) of radioactive waste at 40 sites throughout the DOE complex (goal 4).

Specific waste treatment activities to eliminate the most significant environmental risks include:

1) Operate the Defense Waste Processing Facility (DWPF) at the Savannah River Site to reduce risk associated with storage of liquid HLW:
   - Produce between 125 and 200 canisters at DWPF and process 6 million gallons of Saltstone grout (goal 1).

2) Operate New Waste Calcining Facility at Idaho to convert 580 m^3 of liquid HLW into calcine (goal 1).

3) Improve safety of tank waste storage at Hanford, Washington (goal 1);
   - Resolve the urgent risks related to liquid wastes stored in tanks at Hanford.

Specific partnership and compliance activities that find new approaches to problems to reduce costs are best exemplified through:

1) Implement Site Treatment Plans as negotiated through the Federal Facility Compliance Act process:
   - Begin or accelerate mixed waste treatment at various DOE locations in response to the Federal Facility Compliance Act (goal 3);
   - Continue operating the Toxic Substances Control Act (TSCA) Incinerator at Oak Ridge, Tennessee, and the Waste Experimental Reduction Facility (WERF) at Idaho to treat mixed low-level waste (goal 2); and
   - Continue support for private vendor treatment services for waste at Oak Ridge, Idaho, and Hanford (goal 2).

PROGRAM MISSION - WASTE MANAGEMENT - DEFENSE (cont'd)

2) Re-engineering Waste Management operations for newly generated waste (goals 1,3):

    - Selected waste management activities have been turned over to the Office of Defense Programs (Kansas City) and other Environmental Management programs (Savannah River) to achieve greater cost efficiencies.
    - Other sites are conducting "mock-billing" pilots to demonstrate greater cost efficiencies.

Specific waste disposal activities include:

1) Begin disposal of TRU waste at the Waste Isolation Pilot Plant (WIPP) following completion of all statutory and regulatory requirements (goals 3,4,5):
    - Receipt of EPA certification for disposal operations;
    - Receipt of RCRA permit from New Mexico;
    - Secretary of Energy decision to operate WIPP as a disposal facility; and
    - Start contact-handled TRU waste disposal operations.

2) Dispose of an estimated 40,000 m^3 of LLW at six sites (goal 5).

Figure 1 provides a summary of the Waste Management performance measures for defense activities. Information related to these graphs is found in the discussions of the individual waste type strategies. These performance measures are further reflected in the site summaries.

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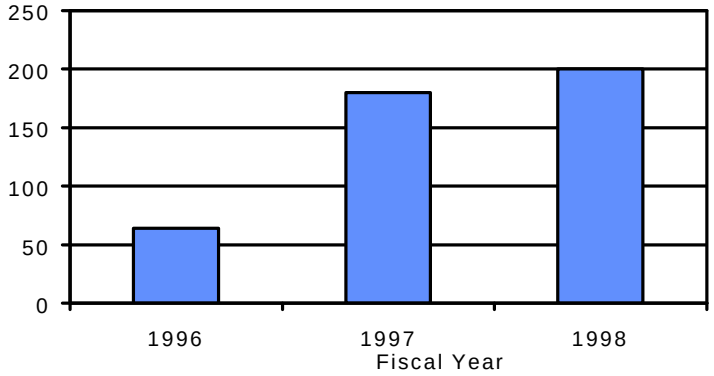
FIGURE 1 - SUMMARY WASTE MANAGEMENT PERFORMANCE MEASURES

High-Level Waste Progress

Disposal Ready

Vitrified Waste Canisters (Annual Production) - Current Inventory = 350,000 m3

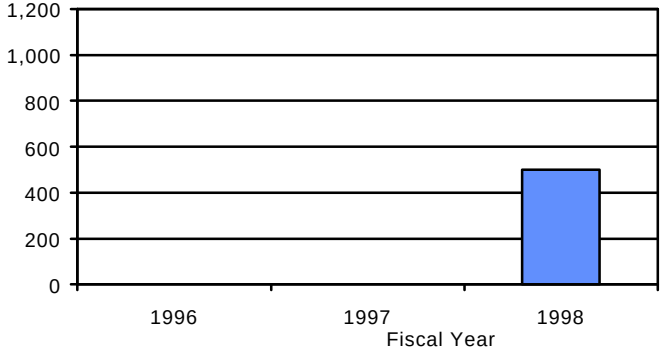


- Commenced vitrification of HLW at Savannah River
- Increase in canister production as steady state approaches

Transuranic Waste Progress

Waste Disposed per Year

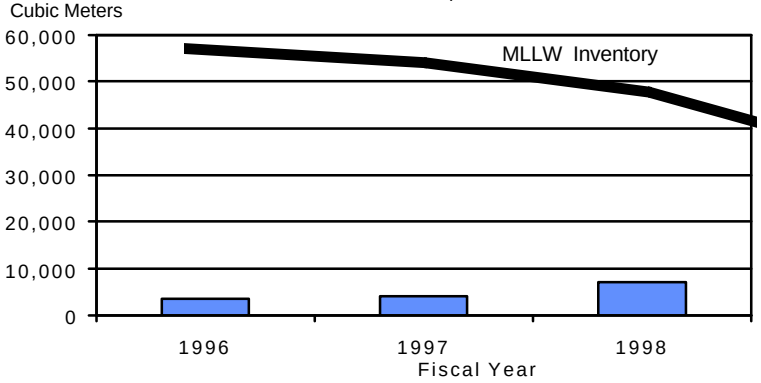
Cubic Meters - Current Inventory = 104,000 m3



- The Waste Isolation Pilot Plant opens in 1998, commencing TRU disposal
- Shipments to WIPP from Idaho, Los Alamos, RF, and Savannah River begin in 98

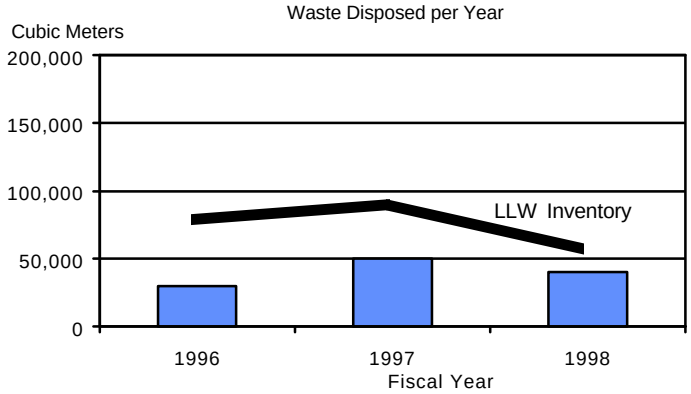
Mixed Low-Level Waste Progress

Waste Treated per Year



- Commence operation of CIF at Savannah River
- Expanding use of commercial treatment capabilities

Waste Disposed per Year



- Steady state LLW disposal in 96-98

PROGRAM MISSION - WASTE MANAGEMENT - DEFENSE (cont'd)

WASTE TYPE STRATEGIES

To achieve these goals, the Department is developing an integrated Ten-Year Plan consistent with our vision to complete as much cleanup as possible within ten years. Completion is dependent on integrated planning strategies for each type of waste managed across the DOE complex, including: high-level waste (HLW), transuranic (TRU) waste, low-level waste (LLW), mixed low-level waste (MLLW), hazardous (HAZ) waste, and sanitary (SAN) waste. Listed below are the strategies that presently support the waste management mission.

High-Level Waste

High-level waste (HLW) is the highly radioactive material resulting from reprocessing of spent nuclear fuel. It consists mainly of liquid waste remaining from the recovery of uranium and plutonium from spent nuclear fuel. Currently, there are about 350,000 m^3 of HLW in storage, with a radioactivity content of about one billion curies. Because of the high radiation level of the waste, it must be remotely-handled and heavily shielded. Also, because it generates heat on its own from radioactive decay, provisions are needed to dissipate heat, thus adding to the cost of managing this type of waste. Some tanks containing HLW at the Hanford Site are among the most significant risks in the complex due to local health and safety concerns.

The long-term objective in the management of HLW is to dispose of it in a geologic repository. The Waste Management Program supports activities by other DOE organizations to assure a geologic repository is completed. Near-term goals for the Waste Management Program include solidifying liquid HLW through operation of the Defense Waste Processing Facility (DWPF) at the Savannah River Site in South Carolina, continuing preparation work for the privatization of HLW treatment at Richland (which is discussed in more detail in the Defense Environmental Management Privatization narrative), and solidification of liquid to a calcine form at the Idaho National Engineering Laboratory (INEL). In FY 1998, it is expected that between 125 and 200 canisters will be produced as a result of vitrification at DWPF and 580 m^3 of liquid HLW will be calcined at INEL.

WASTE TYPE STRATEGIES (cont'd)

Transuranic Waste

Transuranic (TRU) waste is radioactive waste containing more than 100 nanocuries per gram of alpha-emitting isotopes with atomic numbers greater than 92 (uranium) and half-lives greater than 20 years. This waste is the result of the fabrication of plutonium weapons or plutonium-bearing reactor fuels. For some TRU waste, little or no shielding is required; this is referred to as "contact-handled" TRU waste. On the other hand, there is TRU waste containing large amounts of radionuclides, which require shielding because of their gamma-ray or neutron emissions. These are referred to as "remote-handled" TRU waste. There are currently about 104,000 m^3 of TRU waste in the Environmental Management inventory, including both mixed and non-mixed waste, representing about 2 million curies. There are six major sites where TRU waste is located: the Los Alamos National Laboratory, the Rocky Flats Environmental Technology Site, the Oak Ridge National Laboratory, Hanford, the Idaho National Engineering Laboratory, and the Savannah River Site.

It should also be noted, that prior to 1970, TRU waste was considered LLW and disposed through burial. It was then realized that greater confinement from the environment was needed. Since the early 1970's, TRU waste has been segregated from other radioactive waste and placed in retrievable storage. The pre-1970 waste is referred to as "buried" TRU and is managed by the Environmental Restoration Program. Waste that is able to be retrieved from storage is managed by the Waste Management Program.

The near-term goal of the TRU waste program is to complete regulatory requirements to allow disposal of defense-related TRU waste at the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico, beginning in FY 1998. The long-term goal is to dispose of all defense TRU waste in this repository. By opening WIPP, a significant portion of this waste will be isolated from the environment and safely disposed. In FY 1997 the majority of the activities trying to advance the TRU program are related by: providing technical support for the compliance certification application submitted to EPA in October 1996; receipt of the RCRA permit from the State of New Mexico, preparing WIPP to receive radioactive waste; and preparing waste for shipment to WIPP from Idaho, Los Alamos, and Rocky Flats. During FY 1998, major activities include receipt of the Environmental Protection Agency (EPA) certification; the Secretary of Energy decision to operate WIPP as a disposal facility; and the start of contact-handled waste disposal operations.

WASTE TYPE STRATEGIES (cont'd)

Low-Level Waste

Low-level waste (LLW) is defined as any radioactive waste which is not high-level, transuranic, spent nuclear fuel, or mill tailings. The majority of LLW is material contaminated with small amounts of radioactivity and can be contact-handled. However, a small amount can also be sufficiently radioactive as to require shielding to protect workers, the public, and the environment.

Low-level waste is currently disposed at the Los Alamos National Laboratory, the Idaho National Engineering Laboratory, Savannah River, Oak Ridge, Nevada, and Hanford sites; the last two sites also accept off-site LLW from the DOE Complex. Savannah River accepts a small volume of LLW from the Naval Reactors Program.

The near-term and long-term goals of the defense-funded LLW Management Program are nearly identical: to continue disposal of LLW in an environmentally-safe manner at a pace to eliminate currently stored LLW and match generation of new waste. The benefits of this program include the disposal of very large volumes of waste in a manner which protects workers and the public, meets DOE requirements, and is cost-effective. In FY 1998, it is expected that approximately 40,000 m^3 of LLW will be disposed.

Mixed Low-Level Waste

Mixed low-level waste (MLLW) consists of both hazardous (as defined by the Resource Conservation and Recovery Act) and radioactive (as defined by the Atomic Energy Act) components and is not high-level or TRU waste. There is approximately 58,000 m^3 of MLLW in inventory. The long-term goal for MLLW is to develop the necessary treatment and disposal capacity needed to dispose of the existing inventory as well as any newly generated waste.

The Department has worked with the states, the Environmental Protection Agency (EPA), Indian Tribes, and stakeholders through the Federal Facility Compliance Act of 1992 process and other mechanisms to develop a national configuration of mixed waste treatment facilities. The Department has in place 35 Site Treatment Plans enforced by the states or EPA through compliance orders for the development of mixed waste treatment capacity. The Department is also continuing to work with the states, EPA, Indian Tribes, and stakeholders to determine the most appropriate location of disposal facilities. The near-term goal for mixed waste is to develop treatment capacity as outlined in the Site Treatment Plans and to complete site selection for disposal facilities. In FY 1998, it is expected that approximately 7,000 m^3 of waste will be treated at various DOE and private facilities. The major activities in FY 1998 include continued operation of the existing incinerators at Oak Ridge, Tennessee and Idaho Falls, Idaho; and continued support of private vendor treatment services at Oak Ridge, Tennessee; Rocky Flats, Colorado, and Hanford, Washington.

WASTE TYPE STRATEGIES (cont'd)

Hazardous and Sanitary Waste

The Department of Energy's Hazardous Waste Program includes wastes regulated under the Resource Conservation and Recover Act (RCRA), the Toxic Substances Control Act (TSCA), and the State(s).

Hazardous waste as defined by RCRA contains concentrations of physical or chemical characteristic that may cause or contribute to mortality or illness or pose a substantial threat if not properly managed. Hazardous waste can be harmful to humans by chemically or physically attacking skeletal, nervous, or other bodily systems. The most common hazardous wastes generated by DOE include spent solvents, corrosives, ignitables, metals, specialty chemicals used by research and development laboratories, explosives, polychlorinated biphenyls (PCBs), and asbestos. In FY 1998, the Waste Management Program is expected to treat and/or dispose of between 10,000 and 25,000 m^3 of non-waste water hazardous waste. Hazardous waste is primarily treated and disposed of by commercial vendors.

Sanitary waste is office waste, cafeteria waste, sewage, sewage sludges, plastic, wood, rubber, rags, and similar materials. Solid sanitary waste is disposed in approved sanitary landfills, and liquid sanitary waste is treated in wastewater treatment facilities prior to discharge into the environment. The Department uses both on-site and off-site disposal facilities for sanitary waste treatment and disposal.

The near- and long-term goals for the management of both hazardous and sanitary waste are the same: maintain regulatory compliance while cost effectively treating and disposing of waste as it is generated. In FY 1998, efforts focusing on improvements to the efficiency of the program will continue.

Figure 2 provides an overview of the allocation of the Waste Management budget for each of the major waste types. This figure shows that the highest budget allocations are to high-level waste and transuranic waste to maximize risk reduction benefits, compliance activities, mortgage reduction, and mission completion.

DEPARTMENT OF ENERGY

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WASTE MANAGEMENT - DEFENSE

FIGURE 2 - WASTE TYPE FUNDING

Office of Waste Management
Budget Distribution by Waste Type

(Thousands of Dollars)

Waste Type	FY 1996 Comparable	FY 1997 Appropriation **	FY 1998 Congressional Request ***
HLW	$ 780,000	$ 665,000	$ 645,000
TRU	257,000	264,000	272,000
MLLW	250,000	185,000	178,000
LLW	179,000	160,000	176,000
HAZ	68,000	60,000	58,000
SAN	13,000	10,000	7,000
OTHER *	223,000	237,000	120,000
TOTAL	$ 1,770,000	$ 1,581,000	$ 1,456,000 ****

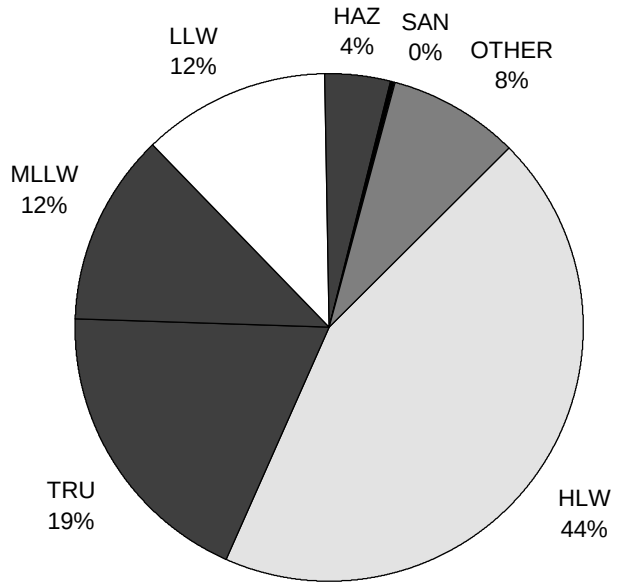
* Other includes Special Case Waste, Waste Minimization, Program Management, and Fixed Infrastructure.

** FY 1997 does not include Privatization, Spent Fuel, Program Direction, or Rocky Flats.

*** FY 1998 does not include Privatization, Spent Fuel, Program Direction, Rocky Flats, or Construction Projects.

**** Rounded budget request. Actual budget is $1,455,576.

FY 1998 Percent of Budget by Waste Type



PROGRAM MISSION - WASTE MANAGEMENT - DEFENSE (cont'd)

BUDGET STRUCTURE

The following list defines the funding categories used in this budget by the Office of Waste Management.

Program Management

This category includes strategic and long-range planning activities, provides for technical expertise on Safety and Environmental documentation preparation and review and other program specific support services. No funds are included here for Federal salaries and expenses in FY 1998.

Facility Operations and Maintenance

This program category funds the routine operation and maintenance of storage and treatment facilities for all waste types at defense funded facilities. Waste is either disposed off-site or held in storage pending the opening of disposal facilities, such as those that are needed for high-level and transuranic waste. Facility operations and maintenance includes a comprehensive set of base program activities essential to assure effective and efficient operation of DOE waste management facilities. Examples of activities funded include securing permits and preparation of reports required by environmental regulations, general training and support of technical contractor staff, and operation and maintenance of facilities needed to treat HLW, LLW, MLLW, sanitary or hazardous wastes.

New Facilities

This program category includes the operating expense costs related to physical construction. It includes the costs of engineering studies, preliminary design of new projects and the cost of minor modifications to existing facilities needed for waste management operations. It also includes any environmental impact documentation, Safety Analysis Reviews (SAR) and Operational Readiness Reviews (ORR) necessary to construct and begin operations of a new or substantially modified facility. Starting in FY 1998, all capital funding requests previously budgeted here will be included in the National Defense Asset Acquisition appropriation. Once the facility is operational, all annual and outyear costs, including capital equipment not related to construction, will be funded under the Facility Operations and Maintenance budget.

Defense Waste Processing Facility

This activity includes the management, operations, and maintenance costs for the Defense Waste Processing Facility (DWPF) at the Savannah River Site. The DWPF hot startup occurred in March 1996. Ultimately, the DWPF will treat all of the 126,500 cubic meters of HLW stored in 51 underground storage tanks at Savannah River.

PROGRAM MISSION - WASTE MANAGEMENT - DEFENSE (cont'd)

BUDGET STRUCTURE (cont'd)

Waste Isolation Pilot Plant

This category provides funds for the Waste Isolation Pilot Plant (WIPP). Authorized by Congress in 1979 (Public Law 96-164) as the nation's first research and development facility to demonstrate the safe shipment, emplacement, and geologic disposal of defense transuranic (TRU) wastes, the Waste Isolation Pilot Plant is currently scheduled to reach a disposal decision and begin operations in FY 1998.

The National TRU Program was established by DOE to ensure that all TRU waste within the purview of DOE is effectively managed from generation to final disposal. This is accomplished by developing strategic plans and program guidance for TRU waste generation, characterization, certification, packaging, transport, and disposal.

Solid Waste

Funds provided under this budget category address corrective activities necessary to bring out-of-compliance defense facilities into compliance with RCRA, TSCA, provisions of the Hazardous and Solid Waste Amendments, state and local ordinances, and DOE Order. In response to direction from Congress, the Corrective Activities budget was combined with the Waste Management Program in FY 1996. All projects are completely funded, so there will be no future funding requests for new Corrective Activities.

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WASTE MANAGEMENT - DEFENSE

PROGRAM FUNDING PROFILE

	FY 1996 Current Appropriation	FY 1997 Original Appropriation	FY 1997 Adjustments	FY 1997 Current Appropriation	FY 1998 Budget Request	FY 1999 Budget Request
Program Management	$ 215,535	$ 48,509	$ 0	$ 48,509	$ 30,678	N/A
Facility Operations and Maintenance	1,311,744	1,036,433	0	1,036,433	1,051,714	N/A
Former Defense Program Facilities	127,501	0	0	0	0	N/A
New Facilities	196,554	60,398	0	60,398	43,558	N/A
Defense Waste Processing Facility	197,422	156,142	0	156,142	166,741	N/A
Waste Isolation Pilot Plant/National TRU Program	173,486	188,838	0	188,838	162,885	N/A
Subtotal, Operations & Maintenance	2,222,242	1,490,320	0	1,490,320	1,455,576	N/A
Construction	189,856	88,327	2,800 [a/]	91,127	0	N/A
TOTAL, Waste Management	$2,412,098	$1,578,647	$ 2,800	$1,581,447	$1,455,576	$1,310,000 [b/]

Public Law Authorization:

Pub. Law 95-91, DOE Organization Act (1977)
Pub. Law 104-206, The Energy and Water Development Appropriations Act, Fiscal Year 1997
Pub. Law 104-201, National Defense Authorization Act, For Fiscal Year 1997
Pub. Law 102-579, Waste Isolation Pilot Plant Land Withdrawal Act (1992)

a/ Reflects completion of 96-R-43 reprogramming of $2,800,000 for Project No. 89-D-173 at Richland.
b/ Distribution by Program Area may be revised based on the Environmental Management Ten-Year-Plan.

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WASTE MANAGEMENT - DEFENSE

PROGRAM FUNDING BY SITE

	FY 1996 Current Appropriation	FY 1997 Original Appropriation	FY 1997 Adjustments	FY 1997 Current Appropriation	FY 1998 Budget Request
ALBUQUERQUE OPERATIONS OFFICE					
Albuquerque Operations Office (NM)	$ 16,883	$ 9,151	$ 0	$ 9,151	$ 6,650
Grand Junction (CO)	0	0	0	0	0
Kansas City Plant (MO)	5,514	8,024	0	8,024	0
Los Alamos National Laboratory (NM)	50,927	55,133	0	55,133	55,810
Pantex Plant (TX)	11,249	11,194	0	11,194	9,812
Pinellas Plant	3,900	0	0	0	0
Sandia National Laboratory (CA)	2,312	1,775	0	1,775	2,250
Sandia National Laboratory (NM)	15,586	13,985	0	13,985	16,220
Subtotal, ALBUQUERQUE	$106,371	$99,262	$ 0	$99,262	$90,742
CARLSBAD AREA OFFICE					
Program Management	$ 5,540	$ 0	$ 0	$ 0	$ 0
Waste Isolation Pilot Plant (NM)	153,548	165,172	0	165,172	148,718
National TRU Program (NM)	24,152	24,418	0	24,418	14,167
Subtotal, CARLSBAD	$183,240	$189,590	$ 0	$189,590	$162,885
CHICAGO OPERATIONS OFFICE					
Argonne National Laboratory (East) (IL)	$ 4,005	$ 417	$ 0	$ 417	$ 0
Brookhaven National Laboratory (NY)	144	0	0	0	0
Chicago Operations Office (IL)	2,502	0	0	0	0
Subtotal, CHICAGO	$ 6,651	$ 417	$ 0	$ 417	$ 0

PROGRAM FUNDING BY SITE - WASTE MANAGEMENT - DEFENSE (cont'd)

	FY 1996 Current Appropriation	FY 1997 Original Appropriation	FY 1997 Adjustments	FY 1997 Current Appropriation	FY 1998 Budget Request
IDAHO OPERATIONS OFFICE					
Idaho Chemical Processing Plant (ID)	$ 99,480	$ 43,445	$ 0	$ 43,445	$54,924
Idaho National Engineering Lab (ID)	112,238	71,593	0	71,593	82,939
Idaho Operations Office (ID)	13,151	0	0	0	0
Subtotal, IDAHO	$224,869	$115,038	$ 0	$115,038	$137,863
NEVADA OPERATIONS OFFICE					
Nevada Operations Office (NV)	$ 2,657	$ 0	$ 0	$ 0	$ 0
Nevada Test Site (NV)	15,562	16,267	0	16,267	14,578
Subtotal, NEVADA	$ 18,219	$ 16,267	$ 0	$ 16,267	$ 14,578
OAK RIDGE OPERATIONS OFFICE					
K-25 Site (TN)	$ 51,696	$ 49,788	$ 0	$ 49,788	$ 48,633
Oak Ridge National Laboratory (TN)	63,551	48,636	0	48,636	41,313
Oak Ridge Reservation (TN)	47,820	37,144	0	37,144	31,200
Oak Ridge Operations Office (TN)	6,156	0	0	0	0
Y-12 Plant (TN)	39,744	31,718	0	31,718	30,711
Subtotal, OAK RIDGE	$208,967	$167,286	$ 0	$167,286	$151,857
OAKLAND OPERATIONS OFFICE					
Lawrence Berkeley National Laboratory (CA)	$ 350	$ 0	$ 0	$ 0	$ 0
Lawrence Livermore National Laboratory (CA)	46,154	32,818	0	32,818	22,487
Oakland Operations Office (CA)	8,593	1,095	0	1,095	513
Subtotal, OAKLAND	$ 55,097	$ 33,913	$ 0	$ 33,913	$23,000

PROGRAM FUNDING BY SITE - WASTE MANAGEMENT - DEFENSE (cont'd)

	FY 1996 Current Appropriation	FY 1997 Original Appropriation	FY 1997 Adjustments	FY 1997 Current Appropriation	FY 1998 Budget Request
OHIO FIELD OFFICE					
Mound Plant (OH)	$ 8,060	$ 0	$ 0	$ 0	0
Ohio Operations Office (OH)	5,661	0	0	0	0
Subtotal, OHIO	$ 13,721	$ 0	$ 0	$ 0	$ 0
RICHLAND OPERATIONS OFFICE					
Richland (WA)	$877,711	$463,603	$ 2,800 [a/]	$466,403	$422,216
ROCKY FLATS FIELD OFFICE					
Rocky Flats Plant (CO)	$ 80,108	$ 0	$ 0	$ 0	$ 0
SAVANNAH RIVER OPERATIONS OFFICE					
Savannah River Site (SC)	$582,302	$486,696	$ 0	$486,696	$446,389
HEADQUARTERS					
Headquarters (DC)	54,492	6,575	0	6,575	6,046
Headquarters (Pittsburgh)	$ 350	$ 0	$ 0	$ 0	$ 0
Subtotal, Headquarters	$ 54,842	$ 6,575	$ 0	$ 6,575	$ 6,046
SUBTOTAL, Waste Management	$2,412,098	$1,578,647	$ 2,800	$1,581,447	$1,455,576
TOTAL WASTE MANAGEMENT	$2,412,098	$1,578,647	$ 2,800	$1,581,447	$1,455,576

a/ Reflects approved 96-R-43 reprogramming for $2,800,000, Project No. 89-D-173 at Richland.

DEPARTMENT OF ENERGY
FY 1998 CONGRESSIONAL BUDGET REQUEST
DEFENSE ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT

WASTE MANAGEMENT - DEFENSE

ALBUQUERQUE

I. Mission Supporting Goals and Objectives

The Albuquerque Operations Office (AL) currently manages defense waste at six sites in four states. The sites may be categorized into three groups: production facilities, research and development laboratories, and one waste disposal demonstration project. Because of the re-engineering initiative at the Kansas City Plant, the only production facility remaining to be managed in FY 1998 is the Pantex Plant. The laboratories, which consist of the Los Alamos National Laboratory (LANL), Sandia National Laboratory-New Mexico (SNL-NM), and the Sandia National Laboratory-California (SNL-CA) have been involved in studies related to nuclear and non-nuclear weapons components. The waste produced at these facilities include low-level, mixed, hazardous, transuranic, and sanitary waste streams, and small amounts of other waste from research. The primary waste management activities include storage, treatment, and disposal of waste. The last site, the Waste Isolation Pilot Plant (WIPP) funded through the Carlsbad Area Office, is a proposed underground repository facility designed to provide safe disposal of defense-generated post-1970 transuranic (TRU) waste.

The Albuquerque Operations Office will treat and dispose of approximately 20,000 m^3 of all waste types except high-level waste in FY 1998. The facility which produces the largest volume of waste is LANL, and its most significant waste management challenge relates to the remediation of the TRU waste storage pads. The State of New Mexico inspected the facilities and found that TRU mixed waste was not being properly stored. The State issued a Notice of Violation, and a compliance agreement with the State has been signed. Construction of temporary storage facilities for the TRU waste began in FY 1995 supporting removal of approximately 7,000 cubic meters of TRU waste from existing non-compliant storage. The FY 1998 budget provides for increased TRU retrieval and preparation activities at LANL in support of shipment and disposal at WIPP. Additionally, budget profiles for previously planned treatment facilities at LANL and the Pantex Plant have been reduced to reflect realistic project requirements.

Within this FY 1998 Request, the cost of managing newly generated waste associated with FY 1998 planned activities at the Kansas City Plant have been budgeted within the Office of Defense Program's Stockpile Management program. During FY 1998 the Office of Defense Programs will be responsible for the management of the program.

II. Funding Schedule Albuquerque (cont'd)

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 16,883	$ 9,151	$6,650	$-2,501	-27%
Facility Operations and Maintenance	81,604	86,981	82,342	-4,639	-5%
New Facilities	7,884	3,130	1,750	-1,380	-44%
TOTAL, Albuquerque	$ 106,371	$ 99,262	$90,742	-8,520	-9%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT	$16,883	$9,151	$6,650

FY 1996
- Provided Program Direction and Program Control funds for Albuquerque, Waste Minimization programs at AL sites, and New Mexico Agreement In Principle (AIP).

FY 1997
- Support to Nuclear Criticality, Historically Black Colleges and University programs and Workforce Restructuring at Pinellas.

FY 1998
- Provide for the Waste Management Education Research Consortium (WERC).

III. Performance Summary - Accomplishments: Albuquerque (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE	81,604	86,981	82,342

- Continue base waste management program at seven AL sites in five States (FY 1996 and FY 1997); at six AL sites in four States (FY 1998) including maintenance and operation of existing waste management facilities for storage, treatment, and disposal of LLW, Mixed-LLW, TRU, Mixed-TRU, sanitary, and hazardous wastes, characterization of backlog waste, program management and oversight activities.

  FY 1996
  - Initiated mixed LLW treatment and disposal at commercial and other DOE sites, resulting in cancellation or descoping of planned treatment facilities.
  - Constructed storage domes and retrieval enclosure at Los Alamos for TRU waste.

  FY 1997
  - Continue commercial and DOE treatment and disposal of mixed LLW;
  - Responsibility for the Pinellas Base Waste Management Program transferred to the Office of Nuclear Material and Facility Stabilization.
  - Initiate TRU retrieval, repackaging, and placement into compliant storage at Los Alamos and certification for WIPP.

  FY 1998
  - Continue commercial and DOE treatment and disposal of mixed LLW (increasing at SNL-NM); Kansas City Plant ($5,880K) transfers to Defense Programs under the re-engineering initiative.
  - Remediate and store mixed-TRU waste at Los Alamos per State Consent Order; provide for base TRU storage, characterization, and certification activities at Los Alamos.
  - Increase retrieval, repackaging, and placement operations and certification for WIPP; begin shipments to WIPP from Los Alamos.

III. Performance Summary - Accomplishments: Albuquerque (cont'd)

	FY 1996	FY 1997	FY 1998
NEW FACILITIES			
- Replace leaking industrial waste water pre-treatment piping project at the Kansas City Plant to maintain secondary containment; (in FY 1998 transferred to Defense Programs under re-engineering initiative for completion).	330	2,390	0
- Began construction of the High Explosive Wastewater Treatment Facility at LANL; Project provides for the collection and treatment of high explosive wastewater generated at facilities within LANL.	4,445	0	0
- Conduct new facility design and upgrades at LANL. In FY 1998 funds are required to upgrade the Radioactive Liquid Waste Treatment Facility to facilitate compliance with the Clean Water Act and revised New Mexico State discharge limits for nitrates.	2,279	740	1,750
- Mixed Waste Receiving and Storage Facility was canceled in FY 1996. Funds reprogrammed to purchase equipment that completed the same objective.	830	0	0
Subtotal, New Facilities	7,884	3,130	1,750
TOTAL, Albuquerque Operations Office	$106,371	$99,262	$90,742

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998: Albuquerque (cont'd)

PROGRAM MANAGEMENT - In FY 1998, increase for resumption of funding for Agreement in Principle (+$1,650K) is offset by decreases in Pinellas workforce restructuring, WERC, and HBCU efforts.	($2,501)
FACILITY OPERATIONS AND MAINTENANCE - FY 1998 increase in TRU remediation work at LANL (+$5,224), offset by decrease in operations at various sites (-$3,983), and transfer of Kansas City Plant to the Office of Defense Programs (-$5,880).	($4,639)
NEW FACILITIES - FY 1998 increase of facility design/upgrades at LANL (+$1,010) offset by decrease due to completion of project at Kansas City Plant (-$2,390).	($1,380)

WASTE MANAGEMENT - DEFENSE

CARLSBAD AREA OFFICE

I. Mission Supporting Goals and Objectives

Transuranic (TRU) waste is a by-product of the nation's nuclear weapons research, development, production, and decommissioning activities. Originally, TRU waste was buried as LLW in DOE constructed landfills. Since 1970, however, TRU waste has been placed in retrievable storage pending the completion and opening of a geologic disposal facility. The WIPP site is located in southeastern New Mexico near Carlsbad, 2,150 feet underground in ancient salt beds, which provide a stable medium for disposal. In October 1992, Congress passed the WIPP Land Withdrawal Act (Public Law 102-579), which permanently transferred public lands to DOE. The Act also established about 140 separate requirements for DOE and other Federal Agencies. Key among the new requirements was a new regulatory framework in which the Environmental Protection Agency (EPA) must certify WIPP's compliance with the radioactive waste disposal standards (40 CFR 191) prior to establishing WIPP as a disposal site. In October 1993, DOE initiated a revised test strategy where tests with radioactive waste would be conducted in laboratories rather than underground at WIPP. This enhanced laboratory program would collect required technical data more quickly at a lower cost. Additionally, DOE accelerated the preparation of a compliance certification application document and submitted the document to the EPA in October 1996. The WIPP Land Withdrawal Amendment Act of September 1996 deleted duplication in regulatory compliance by exempting WIPP from 40 CFR 268, No Migration Variance Petition. It also deleted the mandatory 180 day waiting period after the Secretarial decision for commencement of waste operations. Current major WIPP program activities include: (1) conducting an experimental program to maintain recertification data necessary to characterize the operational repository environment, including field studies, laboratory studies, engineering design, and modeling studies; (2) maintaining performance assessment analyses to predict the long-term behavior of the repository; (3) maintaining the WIPP facility in compliance with DOE rules and regulations and with the necessary staffing to ensure the operational integrity of the facility. During FY 1997, the major activities include providing technical support for the application during the EPA rulemaking process and completing the Disposal Phase Supplemental Environmental Impact Statement Record of Decision by August 1997. During FY 1998, DOE expects the final EPA rulemaking on the compliance certification application document, the Secretary of Energy decision to operate WIPP as a disposal facility, and the start of contact-handled disposal operations.

The Waste Isolation Pilot Plant is on schedule for initial waste receipt in FY 1998, and will continue or complete many of the Land Withdrawal Act requirements in FY 1997. Major activities expected to be completed during FY 1997 include the submission to the Environmental Protection Agency (EPA) of the final regulatory compliance certification application (40 CFR 191), issuance of the Disposal Phase Supplemental Environmental Impact Statement Record of Decision, and preparations for start of disposal operations to be initiated in FY 1998.

I. Mission Supporting Goals and Objectives: Carlsbad (cont'd)

Activities expected to be completed during FY 1998 include anticipated receipt of EPA certification of compliance with the disposal standards (40 CFR 191/194), the Secretary of Energy decision to operate WIPP as a disposal facility, and start of contact-handled radioactive transuranic waste disposal operations.

II. Funding Schedule

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 5,440	$ 0	$ 0	$ 0	n/a
Waste Isolation Pilot Plant	153,548	165,172	148,718	-16,454	-10%
National TRU Program	24,152	24,418	14,167	-10,251	-42%
TOTAL, Carlsbad Area Office	$ 183,240	$ 189,590	$162,885	-26,705	-14%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT			
- In FY 1996 provided Program Direction funds to support Waste Management Federal FTEs. In FY 1997 and FY 1998 Program Direction funds are requested under the Program Direction account.	$ 5,540	$ 0	$ 0

III. Performance Summary - Accomplishments: Carlsbad (cont'd)

	FY 1996	FY 1997	FY 1998
WASTE ISOLATION PILOT PLANT			
- Continue base facility activities, including Environmental Safety and Health. In FY 1997, continue preparation of the Disposal Operations Final Safety Analysis Report for approval in FY 1998; continue surface and underground maintenance; and continue support for the stakeholder program.	87,118	97,852	92,026
- In FY 1996 continued preparation of final Compliance Certification Application for submittal to EPA; continued actinide source term test and analysis for performance confirmation; continued preparation of the Final Environmental Impact Statement for disposal phase, and submitted the No Migration Variance Petition to the EPA. In FY 1997 complete preparation of final Compliance Certification Application and submit to EPA; continue actinide source term and gas generation tests and analysis for performance confirmation, and issue the Final Environmental Impact Statement for the disposal phase. In FY 1998 continue actinide source term tests and analysis for performance confirmation.	55,506	36,441	7,222
- Continue activities to achieve contact-handled waste facility readiness to receive waste in FY 1998. Provide $20 million annual payment to the State of New Mexico starting in FY 1997.	2,299	24,717	23,392
- Continue performance improvement activities such as the electrical service construction line-item project in FY 1996 and FY 1997. In FY 1998 continue performance improvement activities to accomplish base scope changes due to new regulations and restrictions.	4,314	996	256
- Continue activities to maintain certification and prepare for recertification, including preclosure monitoring systems, performance assessments, and experimental programs.	0	1,546	24,205
- Continue remote-handled waste plans and activities leading to start of operations after FY 2002.	301	308	100
- Continue compliance certainty activities such as waste characterization.	4,010	3,312	1,517
Subtotal, Waste Isolation Pilot Plant	153,548	165,172	148,718

III. Performance Summary - Accomplishments: Carlsbad (cont'd)

	FY 1996	FY 1997	FY 1998
NATIONAL TRU PROGRAM			
- In FY 1996 and FY 1997 waste characterization data was collected for performance assessment and testing the data in the PA model. In FY 1998, continue characterization activities at limited sites.	8,601	586	488
- Continue transportation and waste characterization activities to achieve contact-handled waste facility readiness to receive waste in FY 1998. Initiate disposal of contact-handled TRU waste during FY 1998.	7,900	17,593	13,024
- Continue National TRU Program activities, including waste characterization and management studies.	2,683	3,375	0
- Continue remote-handled waste plans and activities leading to start of operations after FY 2002.	829	1,210	655
- Perform compliance certainty activities.	4,139	1,654	0
Subtotal, National TRU Program	24,152	24,418	14,167
TOTAL, Carlsbad Area Office	$183,240	$189,590	$162,885

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998: Carlsbad (cont'd)

WASTE ISOLATION PILOT PLANT - Decreases occur in experimental programs supporting the compliance application, which is complete in FY 1997.	($7,986)
Reduce efforts for other activities as efforts are focused on initial contact-handled waste receipt.	($8,468)
NATIONAL TRU PROGRAM - Reduce improvements to TRU Waste Transportation System.	($10,251)

WASTE MANAGEMENT - DEFENSE

CHICAGO

I. Mission Supporting Goals and Objectives

The Chicago Operations Office (CH) consists of six Waste Management sites: Argonne National Laboratory-East (ANL-E)-Illinois, ANL-West-Idaho, Ames-Iowa, Brookhaven National Laboratory (BNL)-New York, Fermi National Accelerator Laboratory-Illinois, and Princeton Plasma Physics Laboratory-New Jersey. There are no defense funded activities requested in FY 1998.

II. Funding Schedule

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 2,869	$ 417	$ 0	$ -417	-100%
Facility Operations and Maintenance	3,782	0	0	0	N/A%
TOTAL, Chicago	$ 6,651	$ 417	$ 0	$ 417	-100%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT			
- In FY 1996 provided Program Direction funds to support Waste Management Federal FTEs, and to support Waste Minimization activities; in FY 1997 and FY 1998 Program Direction funds are requested under the Program Direction account.	$ 2,869	$ 0	$ 0
- In FY 1997 funds Waste Management's share of the Department's Nuclear Criticality Predictability Program, which addresses implementation of DNFSB 93-2.	0	417	0
Subtotal, Program Management	2,869	417	0

III. Performance Summary - Accomplishments: Chicago (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE			
- Continued safe and effective management of defense-related waste to ANL-E and provided $3,500,000 for University Robotics as directed in FY 1996 Appropriation Conference Report.	3,782	0	0
Subtotal, Facility Operations and Maintenance	3,782	0	0
TOTAL, Chicago Operations Office	$6,651	$ 417	$ 0

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998

PROGRAM MANAGEMENT - No activity is planned for the Departments' Nuclear Criticality Predictability Program in FY 1998.	($417)

WASTE MANAGEMENT - DEFENSE

IDAHO

I. Mission Supporting Goals and Objectives

The Idaho Operations Office manages the Idaho National Engineering Laboratory (INEL), which is located in southeastern Idaho. The activities at INEL over the last 45 years include nuclear technology research, defense programs, engineering testing and operations, as well as ongoing projects to develop, demonstrate, and transfer advanced engineering technology and systems to private industry. These activities have resulted in an inventory, as well as the continuous generation, of all waste types. Waste Management provides storage, treatment, and disposal capabilities to these ongoing programs through its operations at the Waste Reduction Operations Complex (WROC), the Radioactive Waste Management Complex (RWMC), the Idaho Chemical Processing Plant (ICPP), and the Test Area North (TAN).

Disposition of high-level waste (HLW - approximately 11,000 m^3), transuranic (TRU) wastes (approximately 65,000 m^3) and spent nuclear fuel (SNF) is guided by an agreement (Settlement Agreement) between the Department, the Navy, and the State of Idaho. At the ICPP, the High-Level Liquid Waste Evaporator (HLLWE) reduces the volume of this waste (1.3 million gallons in 11 tanks) while the New Waste Calcining Facility (NWCF) converts the reduced liquids to a more stable solid form. Through its privatization strategy, which is discussed further in the Defense Environmental Management Privatization budget narrative, the DOE Idaho Operations Office will procure a construction contract for an advanced mixed-waste treatment facility (AMWTF) for mixed TRU and alpha-emitting mixed low-level wastes (MLLW). Legally enforceable milestones include issuing the AMWTF contract by June 1997, completing first shipment of untreated TRU to WIPP by April 1999, and having the AMWTF operational by March 2003.

Milestones for the treatment of approximately 1,200 m^3 of stored MLLW are enforceable under the requirements of the Consent Order and Site Treatment Plan adopted under authority of the Federal Facility Compliance Act. Mixed waste sizing, segregation, mercury retorting, and macro encapsulation/stabilization technologies will be demonstrated at the WROC along with incineration at the Waste Experimental Reduction Facility (WERF). Some non-alpha-emitting MLLW will be handled at the AMWTF once it becomes operational. Mixed low-level waste from other sites in the DOE complex will also be treated at WERF as described in the site treatment plan.

Approximately 16,800 m^3 of low-level waste (LLW) was stored at INEL at the end of FY 1996. Low-level waste has been treated and disposed at the WERF and RWMC, respectively. Additional volumes of LLW have been treated and disposed off-site at commercial facilities.

II. Funding Schedule: Idaho (cont'd)

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 16,311	$ 1,960	$ 2,150	$ +190	+10%
Facility Operations and Maintenance	178,676	98,404	116,024	+17,620	+18%
New Facilities	29,882	14,674	19,689	+5,015	+34%
TOTAL, Idaho	$224,869	$115,038	$137,863	$+22,825	+20%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT			
Program Direction			
- Program Management activities provide for site management and coordination. In FY 1996 provided Program Direction funds to support Waste Management Federal FTEs. In FY 1997 and FY 1998 Program Direction funds are requested under the Program Direction account.	$ 13,151	$ 0	$ 0
Agreement in Principal (AIP)			
- Provides for funding to the State of Idaho to perform independent oversight of DOE environmental programs at INEL to ensure DOE activities are protective of human health and the environment.	3,160	1,960	2,150
Subtotal, Program Management	16,311	1,960	2,150

III. Performance Summary - Accomplishments: Idaho (cont'd)

FACILITY OPERATIONS AND MAINTENANCE

IDAHO OPERATIONS OFFICE
WASTE VOLUMES
(in cubic meters)

The INEL waste management program is described in the text below by waste type. Waste Management accomplishments and goals are presented below by management category i.e., storage, treatment for storage, treatment, and disposal.

Waste Type		FY 1996	FY 1997	FY 1998
High-Level Waste	Stored	10,500	9,300	9,300
	Treatment for Storage:			
	Evaporator	1,530	437	0
	Calcination	0	534	714
TRU Waste	Storage	65,000	65,000	65,000
	*Drum Reconfiguration (# of drums)	16,800	16,000	0
Mixed Low-Level Waste	Stored	1,193	1,227	1,148
	Treated	491	198	275
	Disposed	59	13	13
Low-Level Waste	Stored	16,769	8,241	5,885
	Treated	6,489	1,754	1,754
	Disposed	4,298	2,618	2,433

* Activity completed in FY 1997.

III. Performance Summary - Accomplishments: Idaho (con't)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
High-Level Waste	52,766	37,181	40,980
- Performs routine facilities maintenance, upgrades, surveillance, and waste management operations for HLW are performed at the ICPP, managing the liquid HLW tank farm, and evaporation and solidification campaigns at the NWCF. Continue research and development efforts to define the strategy for meeting the requirements of the Settlement Agreement and determine the appropriate HLW form for final dispositioning.			
FY 1996			
- Initiated operation of the new HLLWE and began an evaporation campaign for a volume reduction of approximately 774 m^3.			
FY 1997			
- Complete the FY 1996 evaporation campaign; restart the NWCF and calcined HLW.			
FY 1998			
- Prepare for a new evaporation campaign; - Begin repairs to the NWCF; - Prepare an EIS for final HLW disposition including feasibility studies; and - Complete calcining of all by high-level liquid waste resulting from spent fuel processing.			
TRU	32,546	36,107	38,638
- Perform routine facilities maintenance, upgrades, surveillance, and waste management operations for TRU waste are performed at the RWMC, which serves as storage for approximately 65,000 m^3 of TRU waste. These operations include waste characterization and packaging of TRU waste to meet the current Waste Isolation Pilot Plant waste acceptance criteria (WAC) and maintain operational readiness for disposal at the Waste Isolation Pilot Plant.			

III. Performance Summary - Accomplishments: Idaho (con't)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			

TRU (cont'd)

FY 1996

- INEL reconfigured 16,800 mixed TRU waste containers into RCRA approved storage; and
- Conducted reconfiguration and experimental studies in support of operational startup and disposal at WIPP.

FY 1997

- Provide support for Phase I AMWTF privatization; and
- Complete two-year reconfiguration campaign of 32,800 drums of stored TRU waste.

FY 1998

- Complete support for Phase I AMWTF privatization; and
- Initiate shipment of TRU waste to the WIPP in accordance with the Settlement Agreement.

Mixed Low-Level Waste	21,020	18,246	17,895

- Perform routine facilities maintenance, upgrades, surveillance, and waste management operations for MLLW at the WROC including waste reduction, storage, and monitoring activities. Treatment of MLLW through incineration and non-incineration treatments are also performed to eliminate the MLLW backlog. In addition, MLLW management support is provided at the ICPP from HLW operations and ancillary waste management facilities.

FY 1996

- Treated 491 m^3 , disposed of 59 m^3 of contaminated lead.
- Closed a hazardous waste storage facility and waste engineering building.

FY 1997

- Treat 198 m^3 of MLLW.

III. Performance Summary - Accomplishments: Idaho (con't)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Mixed Low-Level Waste (cont'd)			
FY 1998 - Treat 275 m^3 of MLLW.			
Low- Level Waste - Perform routine facilities maintenance, upgrades, surveillance and waste management operations for LLW at the WROC and RWMC. Dispose of LLW at the RWMC Subsurface Disposal Area and off-site facilities. Provide LLW management support to the ICPP from HLW operations and ancillary waste management facilities.	4,022	3,941	3,066
FY 1996 - Disposed of almost 4,300 m^3 of LLW. - Completed the INEL Site Specific Corrective Action Plan for LLW Management Vulnerabilities in response to Defense Nuclear Facilities Safety Board Recommendation 94-2.			
FY 1997 - Dispose of 2,600 m^3 of LLW. - Prepare the Draft Composite Analysis of Interactive Source Terms in response to the Defense Nuclear Facilities Safety Board Recommendation 94-2.			
FY 1998 - Dispose of 2,400 m^3 of LLW. - Complete the Final Composite Analysis of Interactive Source Terms in response to Defense Nuclear Facilities Safety Board Recommendation 94-2.			

III. Performance Summary - Accomplishments: Idaho (con't)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Other	21,868	2,929	15,445

- Provides program management of hazardous and solid sanitary wastes, industrial and sanitary waste waters, and special case waste; environmental and compliance maintenance; and management oversight and funding for a variety of internal and external INEL activities.

FY 1996
- Provided waste management controls and reporting.
- Supported environmental operations.
- Implemented waste minimization.
- Provided site-wide environmental monitoring and surveillance to achieve compliance with regulatory requirements for all waste types.
- Provided additional environmental monitoring and research studies by the U.S. Geological Survey and external research organizations.
- Provided site-wide waste packaging and transportation and supported public involvement.
- Supported contributions to Historically Black Colleges and Universities.

FY 1997
- The majority of these program activities are transferred to infrastructure accounts managed by the Office of Nuclear Material and Facility Stabilization.

FY 1998
- Restore Waste Management programmatic oversight responsibilities for many of the activities cited for FY 1996.

III. Performance Summary - Accomplishments: Idaho (con't)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Spent Nuclear Fuel	46,454	0	0
- Conduct routine surveillance and maintenance operations for SNF at facilities at the ICPP and TAN. In FY 1996 transferred SNF to safer storage facilities; settled litigation with Public Service Co.; funded surveillance and maintenance of Fort St. Vrain spent fuel; and received and stored Navy fuels. In FY 1997 and FY 1998 SNF responsibility and funding was transferred to the Office of Nuclear Material and Facility Stabilization.			
Subtotal, Facility Operations and Maintenance	178,676	98,404	116,024
NEW FACILITIES			
New Facilities Planning	3,735	9,364	13,792
- Planning for anticipated line-item projects. In FY 1998 - Start planning, conceptual design, and feasibility studies for the HLW Immobilization Plant.			
General Plant Projects	3,971	5,040	5,897
- Provides for the routine upgrade and maintenance of existing facilities, and new construction of small facilities or projects. In FY 1998 - The HLW program will engage in necessary maintenance and upgrades deferred from the previous two years.			
Idaho Chemical Processing Plant High-Level Waste Tank Farm Replacement, Phase I	862	0	0
- Descoped this project greatly in FY 1995. In FY 1996 - Construction largely completed. In FY 1997 - Close out activities completed with carryover funds.			

III. Performance Summary - Accomplishments: Idaho (con't)

	FY 1996	FY 1997	FY 1998
NEW FACILITIES (cont'd)			
Transuranic Storage Area Retrieval Enclosure Facility - In FY 1996 - Construction was largely completed. In FY 1997 - Construction completed, equipment emplaced, and the facility prepared for privatized operations using carryover funds. Close out activities completed.	3,610	0	0
Waste Characterization and Storage Facility - Descope project greatly in FY 1996; Construction for storage and operations facilities was largely completed. In FY 1997 - Close out activities completed.	17,704	270	0
Subtotal, New Facilities	29,882	14,674	19,689
TOTAL, Idaho Operations Office	$224,869	$115,038	$137,863

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998:

PROGRAM MANAGEMENT	
Agreements in Principle - Essentially no change. Program will function at the same level of effort.	$190
FACILITY OPERATIONS AND MAINTENANCE	
High-Level Waste - Increase related to preparation for a new evaporation campaign, technology development for treating sodium bearing wastes, and for beginning an Environmental Impact Statement for final disposition of HLW.	$3,799

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998: Idaho (cont'd)

FACILITY OPERATIONS AND MANAGEMENT (cont'd)	
TRU - Increase reflects initiation of shipment of TRU waste to WIPP.	$2,531
Mixed Low-Level Waste - Essentially no change. Will function at the same level of effort.	($351)
Low-Level Waste - Reduction due to managing approximately $^{2,500\ m3}$ less LLW, and completing several major reports (LLW Disposal Performance Assessment, closure studies, and a response to the DNFSB).	($875)
Other - Increase reflects restoration of management responsibilities to this program that were transferred to infrastructure accounts managed by the Office of Nuclear Material and Facility Stabilization in FY 1997.	$12,516
NEW FACILITIES	
New Facilities Planning - Increase reflects the initiation of planning, and preparation of conceptual design and feasibility studies for the HLW Immobilization Plant.	$4,428
General Plant Projects - Increase reflects necessary maintenance and upgrades within HLW program, which were deferred the previous two years.	$857
Waste Characterization and Storage Facility - Last year of funding was FY 1997.	($270)

NEVADA

I. Mission Supporting Goals and Objectives

The Nevada Operation Office (NV) manages the Waste Management Program at the Nevada Test Site (NTS), a 1,350 square mile facility located approximately 65 miles northwest of Las Vegas, Nevada. While the primary mission of the NTS is related to nuclear testing activities, the waste management mission continues to be the safe storage, treatment, and disposal of a variety of waste streams that are received from the Department of Energy (DOE) and the Department of Defense (DOD) complex within the United States.

The major Waste Management (WM) activity is the disposal of low-level radioactive waste generated at the NTS and other DOE and DOD sites. In 1994 and 1995, 85 percent of the DOE complex off-site low-level waste (LLW) was disposed of at the NTS, the nation's largest volume LLW disposal site (commercial or DOE). Over 500,000 m^3 of LLW from both on and off the NTS have been disposed of at the NTS from the start of disposal operations in 1961 through the end of 1996. Separate disposal facilities for classified LLW have been in use since 1969 at the NTS. Radioactive waste resulting from nuclear accidents/incidents has also been received by the NTS for disposal. Options for disposing of Greater-Than-Class-C radioactive waste (LLW Category) are currently being investigated. Waste disposal operation costs are partially liquidated by disposal fees (recharge basis) provided by the waste generators, and program funds are utilized to fund the remaining disposal and other disposal related activities. The scenario of operating on a full recharge basis is presently being evaluated.

A transuranic (TRU) waste pad stores 619 m^3 of transuranic and mixed transuranic (TRU/MTRU) waste under a state settlement agreement pending opening of the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. The characterization, segregation and re-packaging of the TRU/MTRU waste are being performed in anticipation of shipping this waste to WIPP for ultimate disposal.

Disposal of mixed low-level waste has been available since 1987, although operations were suspended in 1990 due to compliance issues. A revised Resource Conservation and Recovery Act (RCRA) Part B permit currently allows mixed low-level waste generated on-site to be disposed of at the NTS.

Waste Management operates the hazardous waste facility, which accumulates, packages, and transports the hazardous waste offsite for treatment and disposal. The hazardous waste facility operates on a full recharge system, with program funding used only for the RCRA permit and DOE oversight.

WASTE MANAGEMENT - DEFENSE

I. Mission Supporting Goals and Objectives - Nevada (cont'd)

From 1981 to 1989 a series of boreholes, referred to as the Greater Confinement Disposal (GCD) boreholes were used to dispose of TRU, mixed, and low-level DOE approved radioactive waste considered unsuitable for near surface disposal. Of the 13 GCD boreholes constructed, six have been operationally closed. Use of GCD boreholes has been suspended until regulatory issues concerning their possible classification by the state of Nevada as injection wells are resolved. Planning and data gathering activities related to the performance assessment and closure of the GCD boreholes has been in progress since 1989 to meet completion requirements, for waste which has been accepted for disposal.

The Radioactive Waste Acceptance Program, working with the waste operations and performance assessment sections, sets the waste acceptance criteria (WAC). They also field teams who audit the off-site and on-site waste generators to verify they meet the WAC. The NTS also performs site characterization and performance assessments, encompassing the gathering, analysis, and modeling of data obtained from boreholes, wells, geologic work, and monitoring systems to characterize the areas used for waste disposal. The purpose of gathering this information is to confirm the long-term suitability as a waste disposal site per DOE requirements. Various construction projects are in progress or are planned for facilities to support waste management activities. These include such projects as RCRA closure caps for disposal facilities which are at capacity, waste examination facility, storage pads, and other projects to support waste treatment, storage, and disposal operations.

II. Funding Schedule:

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 3,272	$ 3,013	$ 2,387	$ -626	-21%
Facility Operations and Maintenance	11,813	13,254	12,191	-1,063	-8%
New Facilities	3,134	0	0	0	n/a
TOTAL, Nevada	$ 18,219	$ 16,267	$ 14,578	$ -1,689	-10%

III. Performance Summary - Accomplishments: Nevada (cont'd)

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT	$ 3,272	$ 3,013	$ 2,387

- Provides for: the site strategic and program planning and integration as well as program management and control including Baseline Environmental Management Report, Waste Management Plan, Strategic Plan, project and cost control systems; community/stakeholders relations regarding DOE/EM activities in Nevada, training, Radioactive Waste Acceptance Program; quality assurance and self-assessment; maintenance of a Performance Measurement System to support the DOE/HQ Progress Tracking System; cost estimate reviews and cost validations; and educational and research opportunities within the University of Nevada system.

- In FY 1996 provided Program Direction funds to support the Waste Management Federal FTEs for Nevada site. In FY 1997 and FY 1998 Program direction funds are requested and provided under the Program Direction account.

FACILITY OPERATIONS AND MAINTENANCE	11,813	13,254	12,191

- Supports the cradle-to-grave tasks from the acceptance of waste through the closure of waste disposal units. This includes the acceptance, treatment, storage, and disposal of all Mixed Low-Level Waste (MLLW), Hazardous Waste, Low-Level Waste (LLW), Transuranic Waste (TRU), and Mixed TRU (MTRU) (see disposal chart below). Supporting tasks include the on-site waste generator project, the integrated closure project, hazardous waste facility, baseline operations, technical support, routine site monitoring, performance assessments, site characterization, data management, permitting and NEPA requirements for specific projects, General Plant Projects, and Capital Equipment.

III. Performance Summary - Accomplishments: Nevada (cont'd)

NEVADA OPERATIONS OFFICE
(in cubic meters)

	FY 1996	FY 1997	FY 1998
		Low-Level Waste	
Disposal			
On-site Waste	1,573	2,830	2,830
Off-site Waste	11,145	9,913	9,913
		Mixed Low-Level Waste	
Disposal	5	35	4
		Hazardous Waste	
Shipment for			
Off-site Disposal	123	100	100

III. Performance Summary - Accomplishments: Nevada (cont'd)

	FY 1996	FY 1997	FY 1998
NEW FACILITIES			
- Performed construction project planning, engineering, and construction of Waste Management Program project related facilities and processes necessary for the storage, treatment, and disposal of radioactive waste at the NTS.			
FY 1996			
- Continued Road 5-01 Reconstruction project (95-D-406).			
- Liquid Waste Treatment Facility System (94-D-402) canceled after customer needs requirement analysis conducted and showed no need. Funds used to offset FY 1997 new Budget Authority.			
FY 1997			
- Road 5-01 Reconstruction project to be deferred and/or canceled pending NTS EIS Record of Decision.			
FY 1998			
- Continue support of conceptual design efforts for proposed new construction projects including completing the conceptual design for low-level waste disposal controlled area access building.			
Subtotal, New Facilities	3,134	0	0
TOTAL, Nevada Operations Office	$18,219	$16,267	$14,578

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998:

PROGRAM MANAGEMENT - Decrease reflects reduction in level of effort, and consolidation of planning and support services activities.	($626)
FACILITY OPERATIONS AND MAINTENANCE - Decrease reflects completion of site characterization and performance assessment milestones.	($1,063)

WASTE MANAGEMENT - DEFENSE

OAK RIDGE

I. Mission Supporting Goals and Objectives

The Waste Management (WM) Program at the Oak Ridge Operations Office (OR) in Oak Ridge, Tennessee, manages the waste at the K-25 Site (formerly the Oak Ridge Gaseous Diffusion Plant), the Oak Ridge National Laboratory (ORNL), and the Oak Ridge Y-12 Plant. These three sites are located on the Oak Ridge Reservation (ORR). The ORR has a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Federal Facility Agreement (FFA), and a unilateral order for Resource Conservation and Recovery Act Land Disposal Restrictions (RCRA LDR).

The OR WM Program manages all waste types except for high-level waste. The OR WM Program also manages over 70 percent of all of the DOE remote handled (RH) transuranic (TRU) waste, which presents problems similar to high-level waste. Oak Ridge continues to make progress towards mission completion of all waste types. In FY 1998, approximately 1,000 cubic meters of mixed low-level waste (MLLW) will be treated by the TSCA incinerator and 900 cubic meters of LLW will be disposed. Major activities leading to preparation of the RH TRU waste for shipment to the Waste Isolation Pilot Plant (WIPP) will be underway in FY 1998. Oak Ridge expects to begin shipping TRU waste to WIPP in 2002. A significant accomplishment in FY 1997 for Oak Ridge will be the treatment of some MLLW by private companies. This competitive approach is expected to reduce costs to DOE and lead to, in FY 1998, treating MLLW using a broad-spectrum privatized treatment contract. It is expected this contract will provide major capacity to meet the MLLW treatment needs of the DOE complex. Funding for these privatized contracts was appropriated under the Defense Environmental Management Privatization Initiative (Fixed Asset Acquisition) account in FY 1997. Hazardous and sanitary waste are treated and disposed in compliance with regulations.

II. Funding Schedule:

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 29,100	$ 10,487	$ 10,947	$ +460	+4%
Facility Operations and Maintenance	153,845	146,407	140,630	-5,777	-4%
New Facilities	26,022	10,392	280	-10,112	-97%
TOTAL, Oak Ridge	$208,967	$167,286	$151,857	$-15,429	-9%

III. Performance Summary - Accomplishments: Oak Ridge (cont'd)

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT	$5,320	$ 0	$ 0
- Provided site management and coordination. In FY 1996 provided Program Direction funds to support Waste Management Federal FTE's. In FY 1997 and FY 1998 Program Direction funds are requested under the Program Direction account.			
Program and Reservation Support	17,254	10,487	10,947
- Funds support for WM privatization activities, risk analysis, stakeholder interactions, WM progress tracking, and integration of regulatory compliance, waste tracking/storage/acceptance, safety and health, and off-site waste shipments.			
Funded Pollution Prevention/Waste Minimization	4,501	0	0
- Program conducted to reduce risk and out-year costs (transferred to the Office of Nuclear Material and Facility Stabilization in FY 1997).			
Funded Spent Nuclear Fuel Storage	2,025	0	0
- Included water control and liner replacement for storage wells and repackaging of fuel for off-site shipment to reduce risk. (Transferred to the Office of Nuclear Material and Facility Stabilization in FY 1997).			
Subtotal, Program Management	29,100	10,487	10,947
FACILITY OPERATIONS AND MAINTENANCE			
Compliance Requirements	116,233	106,205	106,801
- In support of FY 1998 compliance requirements, the Oak Ridge Operations Office treats, stores, and disposes of hazardous, radioactive and mixed waste and stores transuranic (TRU) waste from the three Oak Ridge Reservation sites (more than 90 operational TSD facilities).			

III. Performance Summary - Accomplishments: Oak Ridge (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
FY 1996 - Completed the Solid Waste Storage Area (SWSA)-5N burial ground closure assessment; - Continued to transfer Bethel Valley remote-handled (RH) TRU sludge to Melton Valley. - Supported the issuance of the Draft Request-for-Proposal for private sector treatment of RH TRU sludge to meet regulatory requirements and reduce risks and out-year costs. FY 1997 - Continue the transfer of Bethel Valley RH TRU sludge to Melton Valley. - Support award of a contract for commercial treatment using funds under the National Defense Asset Acquisition appropriation. FY 1998 - Complete transfer of Bethel Valley RH TRU sludge to Melton Valley; - Support permitting and licensing activities for private sector treatment of RH TRU sludge.			
Waste Disposal - Solidify liquid LLW from the Melton Valley storage tanks for disposal at the Nevada Test Site (NTS) to reduce risk and free storage capacity.	0	0	2,933
Liquid Low-Level Waste Tank Compliance - Implements liquid LLW tank compliance requirements of the FFA pertaining to the Oak Ridge National Laboratory liquid LLW tank systems to ensure structural integrity of the systems, provide secondary containment and leak detection, and maintain source control pending final remediation.	4,400	5,395	4,448
Disposal Activities - Funds the Integrated Mixed Waste Program activities to meet mixed waste characterization and treatment milestones required by the Tennessee Commissioner's Order (under the Federal Facilities Compliance Act).	23,132	23,460	20,253

III. Performance Summary - Accomplishments: Oak Ridge (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Remote Handed (RH) TRU Sludge	10,080	11,347	6,195
- Funds activities supporting the private sector treatment of Remote Handed (RH) TRU sludge to expedite disposal and to reduce costs. The privatized contract is funded under the National Defense Asset Acquisition Appropriation in FY 1997.			
Subtotal, Facility Operations and Management	153,845	146,407	140,630
NEW FACILITIES	26,022	13,393	280
To support FY 1998 start-up of upgraded facilities and increase needed storage and disposal capacity.			
FY 1996			
- Completed construction of the Plant Drains Wastewater Treatment Upgrades (93-D-174) and the K-25 Sewage Collection System Rehabilitation (92-D-188) projects;			
- Continued construction of the Melton Valley Liquid LLW Storage Tank Capacity Increase (94-D-404), Oil Dike 7/8 Upgrade (92-D-188), and Industrial Landfill V and Construction/Demolition Landfill VII, Phase II (95-D-405) projects.			
FY 1997			
- Complete construction of the Oil Dike 7/8 Upgrade project;			
- Continue construction of the Melton Valley Liquid LLW Storage Tank Capacity Increase and Landfills V and VII, Phase II projects.			
FY 1998			
- Provide operating support to complete construction of the Melton Valley Liquid LLW Storage Tank Capacity Increase and Landfills V and VII, Phase II projects.			
Subtotal, New Facilities	26,022	10,393	280
TOTAL, Oak Ridge Operations Office	$208,967	$167,286	$151,857

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998: Oak Ridge (cont'd)

PROGRAM MANAGEMENT - Increase due to inflation.	+$460
FACILITY OPERATIONS AND MAINTENANCE - Major reduction in the planned TRU waste disposal support activities due to program efficiencies and deferral of selected program activities.	($5,777)
NEW FACILITIES - Decrease reflects completion of several construction projects and defer new projects in favor of using private sector treatment options and off-site disposal. Transfer construction project requests to the National Defense Asset Acquisition appropriation.	($10,112)

OAKLAND

I. Mission Supporting Goals and Objectives

The Oakland Operations Office manages waste operations at the Laboratory for Energy-Related Health Research (LEHR), Lawrence Berkeley National Laboratory (LBNL), Lawrence Livermore National Laboratory (LLNL), Energy Technology Engineering Center (ETEC), and the Stanford Linear Accelerator Center (SLAC). The facilities perform a number of diverse research and development activities. Only LLNL is funded from the Defense account.

The LLNL is an energy research and weapons development laboratory. Compliant storage, treatment, and off-site shipment for disposal of both legacy and currently generated hazardous and radioactive waste is the primary objective of the Waste Management Program at LLNL.

II. Funding Schedule

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 9,943	$ 1,095	$ 513	$-582	-53%
Facility Operations and Maintenance	22,837	20,318	20,137	-181	-1%
New Facilities	22,317	12,500	2,350	-10,150	-81%
TOTAL, Oakland	$ 55,097	$ 33,913	$ 23,000	$-10,913	-32%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT	$9,943	$1,095	$513

FY 1996

- Provided Program Direction and program control funds to support Waste Management activities.
- Funded Waste Minimization activities and supported the Federal Facility Compliance Act (FFCAct) activities and other requirements.

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT Oakland (cont'd)			
FY 1997 and FY 1998 - Program Direction and program control funds are requested under the Program Direction account. - Limited support remains for Federal Facility Compliance Agreement and other requirements.			
FACILITY OPERATIONS AND MAINTENANCE	22,837	20,318	20,137
Waste Management Base Program In FY 1996, FY 1997, and FY 1998 continue to operate and maintain existing treatment and storage facilities for hazardous, mixed, low-level waste for off-site shipments. In FY 1997 and FY 1998 efficiency improvements allow increased work off of Legacy waste.			
NEW FACILITIES	22,317	12,500	2,350
FY 1996 - Began construction of the Decontamination and Waste Treatment Facility, (DWTF) 86-D-103; - Completed Building 612-4 Fire Protection Upgrade and started Explosion Waste Treatment Facility construction using General Plant Project funds; - Began long lead procurement for Mixed Waste Management Facility.			
FY 1997 - Continue construction of DWTF; - Initiate development of Molten Salt Oxidation (MSO) program.			
FY 1998 - Continue construction activities, which are requested under the National Defense Asset Acquisition account; - Initiate development of Molten Salt Oxidation program under Mixed Waste Management Facility.			
TOTAL, Oakland Operations Office	$55,097	$33,913	$23,000

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998: Oakland (cont'd)

PROGRAM MANAGEMENT - Decrease of defense support services to the Oakland Operations Office due to greater efficiencies and reduced activities requiring monitoring.	($582)
FACILITY OPERATIONS AND MAINTENANCE - Complete MSO in FY 1998.	($181)
NEW FACILITIES - Decrease of $10,150,000 due to DWTF transferring to the National Defense Asset Acquisition account.	($10,150)

WASTE MANAGEMENT - DEFENSE

OHIO

I. Mission Supporting Goals and Objectives

The Ohio Field Office (OH) was established in FY 1995 and managed waste operations for the Mound Plant. It also provided funding in FY 1996 for the waste management federal staff that supports Mound and the West Valley Demonstration Project, which is funded under the Energy Supply Research and Development appropriation.

In FY 1997, all funding for the Mound Plant was transferred to the Office of Nuclear Material and Facility Stabilization. All funding for Federal staff was transferred to the Program Direction account.

II. Funding Schedule

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 5,796	$ 0	$ 0	$ 0	0%
Facility Operations and Maintenance	7,925	0	0	0	0%
TOTAL, Ohio	$13,721	$ 0	$ 0	$ 0	0%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
- In FY 1996 provided Program Direction funds to support Waste Management Federal FTEs. In FY 1997 and FY 1998 Program Direction funds are requested under a newly established Program Direction account.	$ 5,796	$ 0	$ 0
- Successfully characterized all mixed waste; characterized and treated all polychlorinated biphenyl and mixed waste oil; and developed plans to permanently remove all transuranic waste. In FY 1997, funding for the Mound Plant is transferred to the Office of Nuclear Material and Facility Stabilization.	7,925	0	0
TOTAL, Ohio Field Office	$13,721	$ 0	$ 0

WASTE MANAGEMENT - DEFENSE

RICHLAND

I. Mission Supporting Goals and Objectives

The Richland Operations Office (RL) manages the Hanford Site, which is located on 560 square miles (1,450 square kilometers) in southeastern Washington. Hanford was among the first facilities constructed by the Manhattan Project. Historically, the Hanford mission was plutonium production, reactor and processing operations and research related to advanced reactors, energy technologies, and basic sciences. All production activities ceased in 1989. Today the Hanford waste management mission is to safely and efficiently cleanup the previously generated stored waste, often referred to as legacy waste.

The highest priority waste problem at Hanford is the HLW tanks. Over the last few years, the site has been working on the safe storage of high-level waste (HLW), as well as building the infrastructure to stabilize HLW prior to disposal. The 177 HLW tanks hold about 260,000 m^3 of HLW, which represent about 200 million curies of radioactivity. Release of these materials could present significant hazards to workers, the general public, or the environment. Safety concerns and system deficiencies are being addressed to reduce potential health, safety, and environmental risks. Since some tanks are known to have leaked in the past, most of the pumpable liquid has been removed and transferred to double-shell tanks. In the past two years, Richland expanded activities related to reducing risks, including ferrocyanide, flammable gas, and organic tank safety programs. In FY 1998 Richland expects to close a number of safety concerns that were identified in 1993 as Secretarial Safety Initiatives. The Richland Operations Office will complete characterization of high-priority tanks to enable closure of the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-5. Additional instrumentation will be added to selected tanks to improve monitoring capabilities, further reducing risk. The Waste Management Program also provides infrastructure support to and regulatory oversight of the Tank Waste Treatment privatization, requested under the Defense Environmental Management Privatization budget.

The Waste Management Program also manages current and future solid waste and liquid effluent streams in a safe, responsible, cost effective, and legally compliant manner. The Hanford Site manages large volumes of multiple solid wastes, including disposal of 6,000 m^3 of low-level waste and storage of 5,000 m^3 of mixed low-level waste. In FY 1998 the Effluent Treatment Facility will treat and dispose of 120,000 m^3 of process condensate from the 242-A Evaporator, contaminated water from various facilities, contaminated groundwater, and leachate; the 200-Area Treated Effluent Disposal Facility will dispose of about over 1,500,000 m^3 of treated effluent through and the 300-Area Treated Effluent Disposal Facility will dispose of approximately 300,000 m^3 of non-radioactive process waste water. Analytical laboratories will provide site-wide characterization needs, e.g., providing data to perform necessary safety analyses for safe operations at the tank farms and other facilities. The site-wide decontamination services will provide decontamination, volume reduction, packaging services, limited mixed waste treatment, equipment repair, and liquid waste Tank Car maintenance and certification.

II. Funding Schedule: Richland (cont'd)

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 60,873	$ 15,811	$ 1,985	$-13,826	-87%
Facility Operations and Maintenance	500,312	393,115	419,401	+26,286	+7%
Former Defense Program Facilities	170,501	0	0	0	0%
New Facilities	146,025	57,477	830	-56,647	-99%
TOTAL, Richland	$877,711	$466,403	$422,216	$-44,187	-9%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT			
Field Support Activities	$35,668	$15,811	$1,985
FY 1996 - Supported the Pacific Northwest National Laboratory (PNNL) voluntary reduction in force, contract transition costs, waste minimization assessment and report.			
FY 1997 and FY 1998 - Support performance baseline, strategic, and Ten-Year Plan.			
Program Management	25,205	0	0
- In FY 1996 - Provided funds to support Waste Management Federal FTEs. In FY 1997 and FY 1998 Program Direction funds are requested under a newly established Program Direction account.			
Subtotal, Program Management	60,873	15,811	1,985

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Tank Farm Operations	124,827	98,960	85,349

- Supports minimum safe operations and maintenance of tank farms to ensure that the approximately 60 million gallons of high-level radioactive waste is safely stored in the 177 underground tanks at Hanford.

FY 1996
- Stabilized (removed liquid from) 2 single-shell tanks;
- Installed thermocouples in all ferrocyanide tanks;
- Recovered 6 million gallons of tank space through evaporator campaigns;
- Reduced radioactivity hazard of 3 tank farms (interim stabilized); and
- Improved safety by installation of monitoring systems in 25 flammable gas tanks.

FY 1997
- Stabilize (remove liquid from) 4 single-shell tanks;
- Reduce radioactivity hazard of 2 additional tanks farm (interim stabilize);
- Install new monitoring systems in 17 flammable gas tanks; and
- Install total of 109 automated Tank Monitoring and Control Systems to improve accuracy and reduce cost of data collection (Wyden Bill).

FY 1998
- Stabilize (remove liquid from) 5 single-shell tanks;
- Reduce radioactivity hazard of 2 additional tank farms;
- Complete ventilation upgrades in all double-shell tanks;
- Maintain all tank monitoring systems operational;
- Operate cross-site transfer line;
- Operate up-graded ventilation systems;
- Continue detailed design for small upgrade projects.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Tank Safety	48,121	48,665	64,618

- Supports activities needed to understand and resolve 5 high-priority safety issues required by the Wyden Bill. Safety issues concern the potential for release of radioactive material from the tanks, including: flammable gas; ferrocyanide; organics; high-heat; and criticality.

FY 1996
- Installed improved surface-level gauges, video cameras, and multi-functional instrument trees;
- Completed 18 Secretarial Safety Initiatives;
- Closed Ferrocyanide Unreviewed Safety Question (USQ);
- Resolved critical high-priority safety issue;
- Removed all 24 tanks from ferrocyanide watch list (Wyden Bill);
- Closed unreviewed safety question for flammable gas watch list; and
- Closed DNFSB Recommendation 90-7, ferrocyanide safety issue.

FY 1997
- Perform work needed to close Secretarial Safety Initiatives,
- Complete Final Safety Analysis Report (FSAR);
- Continue work on the resolution of the flammable gas and organic tank safety issues.

FY 1998
- Continue with work on resolutions of flammable gas safety issue and Secretarial Safety Issues;
- Implement numerous safety requirements identified in the FY 1997 FSAR;
- Close all USQs for remaining tanks;
- Resolve high-heat safety issues;
- Implement requirements associated with resolution of organic tank safety issue.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Tank Characterization	76,911	63,995	72,103

- Determine the chemical and physical composition of the wastes in the various tanks to support safety issue resolution, to provide waste information for equipment (e.g., 101-SY mitigation pump), and facilities (e.g., evaporator) design and construction, and develop waste feed specifications for privatized vendors to immobilize tank waste. In general, funding for this activity will be significant because of the technical difficulty and worker safety concerns involved with sampling and analyzing high level radioactive wastes.

FY 1996
- Characterized tanks (93 total completed through 1996) in support of safety issue resolution;
- Completed 3 rotary-mode core sampling trucks to improve availability from 17 percent to 60 percent, and productivity by 90 percent;
- Developed DNFSB-approved revised characterization strategy (Revision 1, 93-5 Implementation Plan);and
- Issued 40 Tank Characterization Reports (TCRs).

FY 1997
- Sample and Analyze 22 additional tanks to support closure of safety issues and support privatization activities.

FY 1998
- Sample and analyze 40 additional tanks.
- Scheduled to issue 21 TCRs.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Tank Farm Program Support	51,809	33,869	24,500

- Provide tank farm program support, including support for base lining, ES&H activities, TWRS-EIS, cost estimating, and system engineering.

FY 1996
- Supported the Ten-Year Plan activities;
- Issued TWRS-EIS; and
- Completed independent cost estimate of TWRS.

FY 1997
- Support the Ten-Year Plan and Program Management Plan;
- Issue TWRS-EIS Record of Decision.

FY 1998
- Support the Ten-Year Plan and Program Management Plan.

Tank Farm Disposal 26,939 11,000 39,807

- Integral to the remediation of the Hanford tank wastes is separation of the tank wastes into a low-activity and a high activity radionuclide fraction. Without separation or pretreatment, disposal activities, the volume of HLW needing to go to a repository would be a magnitude of order greater, and would increase repository costs to DOE by tens of billions of dollars.

FY 1996
- Prepared waste acceptance criteria;
- Provided management support of vendor contracts and regulatory interface and oversight.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Tank Farm Disposal (cont'd)			
FY 1997 - Continue preparation of waste acceptance criteria; - Initiate preconceptual design of support systems for utilization by vendor facilities; - Continue management support of vendor contracts and regulatory interface and oversight.			
FY 1998 - Support award of contract(s) for construction of the pretreatment and immobilization demonstration facilities; - Continue preconceptual design of support systems, i.e., utilities, roads, waste transfer lines, etc., for utilization by vendor facilities; - Complete conceptual design of Immobilized Low Activity Waste Storage Facilities; - Provide management support of vendor contracts and regulatory interface and oversight.			
Tank Farm Retrieval - Federal Regulations and regulatory agreements require the removal of the waste from the underground storage tanks. In addition to the liquids, the HLW tanks also contain substantial amounts of solid material referred to as salt cakes and sludges. This material is very viscous, and, in the case of some of the sludges at the bottom of the tanks, the waste material is hardened similar to concrete. Unfortunately, a substantial amount of radionuclides are contained in the very bottom sludges of a significant number of tanks.	12,953	5,950	4,700
FY 1996 - Established sequence by which tank waste would be retrieved; and - Initiated test demonstration to determine retrieval costs and effectiveness (Hanford Tank Initiative {HTI}).			

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			

Tank Farm Retrieval (cont'd)

FY 1997
- Continue HTI activities;
- Initiate sluicing operations of Tank 241-C-106;
- Initiate study to determine allowable leakage volumes during tank sluicing operations.

FY 1998
- Complete waste removal from Tank 241-C-106;
- Continue HTI activities.

PNNL, Analytical Services, Hanford Environmental Management Plan	73,848	63,538	47,553

- Provide consolidated environmental, regulatory, and laboratory services to Hanford program in support of its mission.

FY 1996
- Provided PNNL B-Cell safety clean out, operational compliance, waste management services, and surveillance and maintenance activities;
- Provided base funding for on-site labs;
- Performed site-wide RCRA operations, groundwater, seismic, effluent and environmental monitoring;
- Provided site-wide planning, regulatory and compliance integration; and
- Managed cultural resources, ecosystem survey, meteorological services, and environmental surveillance.

FY 1997
- Similar to FY 1996 with limited scope reduction.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
PNNL, Analytical Services, Hanford Environmental Management Plan (cont'd)			

FY 1998

- Transfer PNNL defense funding for Buildings 324 and 327 management, including B-cell safety clean out, to Office of Nuclear Material and Facility Stabilization;
- Continue PNNL operational compliance, waste management services, and surveillance and maintenance activities;
- Continue site-wide RCRA operations, seismic, effluent and environmental monitoring; the groundwater monitoring activities has been transferred to the Office of Environmental Restoration; and
- Transfer other activities to the Office of Nuclear Material and Facility Stabilization.

Liquid Effluents, Solid Waste Storage and Disposal, Decontamination	84,904	67,138	80,771

- Provide an effective and efficient system that stores, treats, and disposes of Hanford liquid effluent and solid wastes, as well as provide site-wide decontamination services.

FY 1996

- Started up the Effluent Treatment Facility;
- Treated and disposed of over 300 million gallons of site-wide liquid effluents and evaporator process condensate from double-shell tanks;
- Supported complex-wide radioactive solid waste storage (approximately 5,000 m^3 Mixed LLW) and disposal (approximately 7,000 m^3 LLW) activities; and
- Provided site-wide decontamination services.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
Liquid Effluents, Solid Waste Storage and Disposal, Decontamination (cont'd)			

FY 1997
- Solid waste activities same as FY 1996;
- Treat and dispose of over 450 million gallons of liquid effluents from additional sources including contaminated water from N-Basin and K-Basins, contaminated groundwater, leachates from disposal facilities, cooling water and steam condensate from various facilities; and
- Completion of WRAP I construction and ETF startup and general productivity improvements with contractor performance incentives.

FY 1998
- Solid waste activities same as FY 1997;
- Evaporate 2.2 million gallons of liquid tank waste to reduce need for additional tank space;
- Treat and dispose of over 500 million gallons of liquid effluents; and
- Startup WRAP I TRU Processing Facility.

Subtotal, Facility Operations and Maintenance	500,312	393,115	419,401

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
NEW FACILITIES			
Tank Farm Restoration Safe Operations	12,546	14,675	0

FY 1996
- Completed pre-conceptual design.

FY 1997
- Initiate design activities.

FY 1998
- Complete Title I design activities; initiate Title II design activities;
- All capital construction requested in National Defense Asset Acquisition appropriation.

Tank Farm Upgrades	26,390	15,988	0

FY 1996
- Continued construction of the Tank Farm Ventilation Upgrade (89-D-173);
- Initiated construction of the Coss-Site Transfer Line (93-D-182).

FY 1997
- Complete construction of Tank Farm Ventilation Upgrade;
- Complete construction of Cross-Site Transfer Line;
- Complete ventilation system upgrades to mitigate hazards in SSTs.

FY 1998
- Project activities completed.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
NEW FACILITIES (cont'd)	12,000	13,321	0

Initial Tank Farm Retrieval (Project No. 94-D-407)

FY 1996
- Initiated physical construction.

FY 1997
- Continue construction activities.

FY 1998
- Continue construction activities, which are requested under the National Defense Asset Acquisition appropriation.

Tank 241-C-106 Sluicing	15,298	112	0

FY 1996
- Initiated construction activities.

FY 1997
- Complete construction activities.

FY 1998
- Perform tank waste retrieval sluicing operations.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
NEW FACILITIES (cont'd)			
SWOC/WRAP/T-PLANT	29,581	13,381	830
FY 1996 - Completed construction of new RCRA compliant waste storage facility; - Completed construction of WRAP I TRU processing facility; - Continued T-Plant upgrades.			
FY 1997 - Support operational readiness of WRAP I facility; - Continue T-Plant upgrades.			
FY 1998 - Support T-Plant upgrades and TRU retrieval facility planning.			
Tank Farm Privatization	50,210	0	0
FY 1996 - Approved and awarded contract using direct Waste Management program funding. Future obligations to the contracts are appropriated under the Environmental Management Privatization account in FY 1997 and requested in the Defense Environmental Management Privatization appropriation in FY 1998.			
FY 1997 - Funds requested under new account.			
FY 1998 - Funds requested under new account.			
Subtotal, New Facilities	146,025	57,477	830

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FORMER DEFENSE FACILITIES			
K-Basin	136,000	0	0

Spent Nuclear Fuel (SNF) stabilization project will move SNF from a wet-storage to a dry storage configuration.

FY 1996
- Completed transfer of spent nuclear fuel from PUREX to K-Basin;
- Initiated Canister Storage Building construction;
- Completed Multi-Canister Overpack Phase I design and initiated fabrication of proto-types;
- Initiated Multi-Canister Overpack load testing;
- Completed conceptual design report for cold vacuum drying facility.

FY 1997
- Activity transferred to the Office of Nuclear Material and Facility Stabilization.

FY 1998
- No activity.

B-Plant	34,501	0	0

Includes deactivation of the B-Plant and safe storage of cesium/strontium capsules located at the Waste Encapsulation and Storage Facility.

FY 1996
- Provided safe and compliant storage for approximately 75M curries of radioactivity from about 2000 cesium/strontium capsules located at the Waste Encapsulation and Storage Facility while initiating deactivation of B-Plant;
- Completed return of 13 cesium capsules from the Pacific Northwest National Laboratory to the Waste Encapsulation and Storage Facility;
- Implemented the new Interim Safety Basis for B-Plant;
- Completed planning on the conceptual design for the B-Plant ventilation systems upgrade.

FY 1997
- Activity transferred to the Office of Nuclear Material and Facility Stabilization.

III. Performance Summary - Accomplishments: Richland (cont'd)

	FY 1996	FY 1997	FY 1998
FORMER DEFENSE FACILITIES (cont'd)			
B-Plant (cont'd)			
FY 1998			
- No activity.			
Subtotal, Former Defense Facilities	170,501	0	0
TOTAL, Richland Operations Office	$877,711	$466,403	$422,216

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998:

PROGRAM MANAGEMENT - Decrease reflects reduced pension requirements due to the voluntary reduction in force at PNNL.	($13,826)
FACILITIES OPERATIONS AND MAINTENANCE - Net increase in funding driven by improved tank safety, increase in tank sampling and tank characterization reports, support for Tank Waste Treatment Privatization such as infrastructure systems design and regulatory interface, treatment of liquid wastes, and startup of WRAP I TRU processing. Offsetting decreases are in areas of Tank Farm Operation, completion of TWRS EIS support, completion of Tank 241-C-106 Waste Removal, and transfer of responsibility, funding, and scope for improved facilities management to other EM organizations.	$26,286
NEW FACILITIES - Overall decrease reflects reduction of design activities and transfer of line-item dollars to the National Defense Asset Acquisition account.	($56,647)

ROCKY FLATS

I. Mission Supporting Goals and Objectives

The Rocky Flats Environmental Technology Site (RFETS) is located 16 miles (25 kilometers) northwest of Denver, Colorado. The facility, which lies on a site of about 11 square miles (28 square kilometers), formerly produced nuclear components for nuclear weapons. The new mission statement for RFETS is to manage waste and materials, and to cleanup and convert RFETS to beneficial use in a manner that is safe, environmentally and socially responsible, physically secure and cost effective. The primary waste management activities are waste storage preparation to initiate TRU waste shipments to WIPP in FY 1998, offsite shipment and disposal of low-level waste (LLW), hazardous waste (HAZ) and sanitary waste (SAN), and the development of treatment capacity for mixed waste, as well as offsite treatment and disposal of mixed waste. The funding for Rocky Flats was transferred to the Office of Environmental Restoration in FY 1997.

II. Funding Schedule

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 10,206	$ 0	$ 0	$ 0	0%
Facility Operations and Maintenance	59,646	0	0	0	0%
New Facilities	10,256	0	0	0	0%
TOTAL, Rocky Flats	$ 80,108	$ 0	$ 0	$ 0	0%

III. Performance Summary - Accomplishments: Rocky Flats (cont'd)

	FY 1996	FY 1997	FY 1998
Continued Base Program			
Including waste minimization; recharacterization of backlog waste; storage of transuranic-mixed transuranic waste (TRU/TRU-MW), Low-Level Waste/Mixed-LLW, hazardous and nonregulated solid waste; onsite treatment of about 150,000 gallons of organic waste, over 6,000,000 gallons of Mixed-LLW aqueous waste, and approximately 400 gallons of miscellaneous waste; and offsite disposal of over 206 drums of LLW and 1,200 cubic meters of Mixed-LLW (saltcrete to Envirocare) and over 800 drums of hazardous waste (to facilities); maintained vital safety system equipment in Buildings 374 and 774; completed land disposal restrictions (LDR) treatment compliance activities as described in the site treatment plan (STP); repacked 300 non-compliant containers, and surveillance and maintenance of Buildings 664, the Centralized Waste Storage Facility and approximately twenty other waste storage areas across the site, and aspirated TRU waste containers; performed headspace gas sampling characterization of TRU/Mixed-TRU drums; obtained waste water treatment unit (WWTU) exemption for Building 374.	$ 73,637	$ 0	$ 0
- Initiated Title I Design for one Mixed-LLW treatment system (Miscellaneous Waste) Project No. 96-D-407, required by the FFCAct Compliance Order.	1,900	0	0
- Evaluated rescoping of the Liquid Waste Treatment System Upgrade, Project No. 93-D-178, to support integration of all waste water treatment activities sitewide.	3,900	0	0
- Completed construction for Phase II of the Sewage Treatment Plant Upgrades, Project No. 90-D-126	450	0	0
- Continued construction of New Sanitary Landfill Project No. 92-D-188, for 1996 transfer of the facility to landlord for operation.	221	0	0
TOTAL, Rocky Flats Office	$80,108	$ 0	$ 0

EXPLANATION OF CHANGES FROM FY 1997 TO FY 1998

No activity.

SAVANNAH RIVER

I. Mission Supporting Goals and Objectives

The Savannah River Site (SRS), located near Aiken, South Carolina, has produced nuclear materials for national defense purposes. As one of DOE's larger sites, it includes five nuclear reactors, two chemical separation plants, a fuel and target fabrication facility, a tritium processing facility, two high-level waste (HLW) tank farms, a heavy water rework plant, the Savannah River Technology Center, low-level waste storage and disposal facilities, and a HLW treatment facility, the Defense Waste Processing Facility (DWPF). Savannah River has about 126,300 cubic meters of HLW in the form of liquid, sludge and salt cake. This volume represents about 534 million curies of radioactivity. Storage and treatment of HLW requires significant shielding and remote-handling capabilities.

The site also manages varying amounts of all other waste types. Progress is being made towards mission completion for all waste types. Approximately 1,600 m^3 of mixed low-level waste will be treated by a private vendor in FY 1997. Operations of the Consolidated Incineration Facility will be initiated in FY 1997. This facility is expected to treat Savannah River's current inventory of mixed waste as well as future mixed waste expected to be generated by the operations of DWPF. In FY 1997 2500 m^3 of low-level waste will be volume reduced and disposed. Activities leading towards a decision on the preferred path for treatment of the TRU waste will be ongoing in FY 1997. Hazardous waste and sanitary waste are being treated and disposed through offsite commercial contracts.

A HLW System Plan has been prepared to outline the strategy for safe and efficient management of SRS HLW. The HLW System Plan integrates management of existing and new facilities to stabilize HLW for final disposal and to empty storage tanks so they can be removed from service. Included in the Plan are operating constraints, planning base issues, assumptions, integrated schedules and contingency analyses. The Plan describes three near-term programs: 1) operation of two HLW evaporators to provide more available volume in the tank farms, 2) operation of DWPF, and 3) operation of the In-Tank Precipitation (ITP) facility to provide feed for DWPF. Extended Sludge Processing (ESP) will continue to operate and provide feed for DWPF. Facilities are being constructed to remove liquid waste from storage tanks and provide it to ITP or ESP for processing. The ITP commenced operations in FY 1995 and operations were suspended in FY 1996 pending resolution of issues raised in Defense Nuclear Facilities Safety Board Recommendation 96-1. During FY 1995, startup testing at DWPF involving the use of simulated wastes was completed and the start of radioactive operations occurred in March 1996.

Construction on the Replacement High-Level Waste Evaporator will continue in order to provide a reliable evaporation capability at the Savannah River Site, to avoid the need to build new tanks by concentrating dilute wastes, and to allow retirement of older evaporator systems. Challenges and uncertainties include the need to test and startup first-of-a-kind facilities, maintaining available waste storage space, increasing the processing rate, and managing a highly-complex interdependent system.

During FY 1998 the DWPF will be in continuous operation. Canister production in FY 1997 benefitted from an additional $8 million, raising production to 180 canisters. The range of 125-200 canisters in FY 1998 reflects potential difficulties in bringing on the second feed stream (precipitate) and any startup problems with the Late Wash Facility or the DWPF Salt Process Cell.

II. Funding Schedule:

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 14,750	$ 0	$ 0	$ 0	n/a
Facility Operations and Maintenance	291,304	277,954	260,989	-16,965	- 6%
New Facilities	78,826	52,600	18,659	-33,941	-65%
Defense Waste Processing Facility	197,422	156,142	166,741	+10,599	+7%
TOTAL, Savannah River	$582,302	$486,696	$446,389	$-40,307	-8%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT	$14,750	$0	$0

FY 1996
- Provided Program Direction funds to support Waste Management Federal FTEs;
- Funded Federal Facility Compliance Act (FFCA) requirements and site-wide waste minimization program.

FY 1997 and FY 1998
- Program Direction funds are requested under the Program Direction account; waste minimization activities are transferred to the Office of Nuclear Material and Facility Operations, and FFCA requirements are funded under Facility Operations and Maintenance.

III. Performance Summary - Accomplishments: Savannah River (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE			
High-Level Waste (HLW)	175,514	185,585	202,735

Supports System Safe Operation; Provides for the safe treatment and storage of HLW through the safe operation (including surveillance and maintenance) of the following major activities: F & H Area Tank Farms, 2H & 2F Evaporators, In-Tank Processing (ITP), Extended Sludge Processing (ESP), F/H Effluent Treatment Facility (ETF) and the Consolidated Incineration Facility (CIF).

FY 1996
- Processed first precipitate batch at ITP;
- Commenced startup testing at CIF;
- Treated 19M gallons of waste at ETF;
- Developed tank closure criteria and approved Tank Closure Plan to support first closure of a HLW tank;
- Achieved space gain of 2.1 million gallons in tank farms; processed first sludge batch at ESP for DWPF startup on sludge-only;
- Restored to operation inter-area transfer line between H & S area and F& H area;
- Started up New Waste Transfer Facility (NWTF);
- Supported Spent Nuclear Fuel (SNF) dry storage facility activities.

FY 1997
- Complete safety upgrades to ITP to resolve benzene issues;
- Complete trial burn at CIF and commenced operations;
- Treat 250K pounds of Low-Level Waste (LLW)/Mixed Waste (MW)/Hazardous Waste (HW) at CIF;
- Treat 18M gallons of waste at ETF;
- Achieve space gain of 2.5 million gallons in tank farms;
- Complete closure activities of 2 HLW tanks; and
- Transferred SNF activities to the Office of Nuclear Material and Facility Stabilization.

III. Performance Summary - Accomplishments: Savannah River (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			
High-Level Waste (cont'd)			

FY 1998
- Resume operations at ITP, Produce 135K gallons of precipitate, and transfer to DWPF;
- Reduce CIF operations to minimal to support DWPF;
- Treat 18 million gallons of waste at ETF;
- Continue support activities for FY 1999 tank closures;
- Achieve space gain of 3.0 million gallons in tank farms.

Solid Waste System	115,790	92,369	58,254

Provides funding for the safe handling, treatment, storage, and disposal of solid waste (low-level, mixed, hazardous, transuranic, and sanitary) at the SRS and continuation of safe operations (including surveillance and maintenance) and regulatory commitments for the Solid Waste Program.

FY 1996
- Continued treatment, storage, and disposal of low-level, hazardous, and sanitary waste utilizing onsite and offsite facilities;
- Completed annual update to Site Treatment Plan;
- Initiated operation of M Area Vendor Treatment Facility for mixed waste vitrification;
- Initiated operation of New Solvent Storage Tanks; and
- Initiated vent, purge, and retrieval operations for stored TRU drums.

III. Performance Summary - Accomplishments: Savannah River (cont'd)

	FY 1996	FY 1997	FY 1998
FACILITY OPERATIONS AND MAINTENANCE (cont'd)			

Solid Waste System (cont'd)

FY 1997

- Continue treatment, storage, and disposal of low-level, hazardous, and sanitary waste utilizing onsite and offsite facilities;
- Complete annual update to the Site Treatment Plan;
- Complete mixed waste vitrification at M Area Vendor Treatment Facility;
- Continue operations of New Solvent Storage Tanks;
- Continue vent, purge, and retrieval operations for stored TRU drums;
- Issue second Record of Decision for SRS Waste Management Environmental Impact Statement.

FY 1998

- Continue treatment, storage, and disposal of low-level, hazardous, and sanitary waste utilizing onsite and offsite facilities;
- Complete annual update to the Site Treatment Plan;
- Complete clean closure activities for M Area Vendor Treatment Facility;
- Continue operations of New Solvent Storage Tanks;
- Continue vent, purge, and retrieval operations for stored TRU drums;
- Initiate the Waste Financial Accountability System and transfer of funds to generators for solid waste management operations.

Subtotal, Facility Operations and Maintenance	291,304	277,954	260,989

III. Performance Summary - Accomplishments: Savannah River (cont'd)

	FY 1996	FY 1997	FY 1998
NEW FACILITIES			
High-Level Waste System	71,438	51,015	14,255

FY 1996
- Started up the New Waste Transfer Facility (NWTF);
- Completed construction of the Consolidated Incineration Facility (CIF);
- Continued construction of the Replacement High-Level Waste Evaporator (RHLWE);
- Initiated design of H Tank Farm services upgrade; and
- Continued to provide design and construction of waste removal facilities and infrastructure.

FY 1997
- Complete construction of RHLWE;
- Replace service piping and gang valve systems for 4 HLW tanks;
- Begin demonstration of alternative waste removal techniques for salt in HLW tanks; and
- Continue to provide design and construction of waste removal facilities and infrastructure.

FY 1998
- The following activities will continue to be supported from Waste Management capital construction request and are included in the National Defense Asset Acquisition account.
- Replace service piping and gang valve systems for 3 HLW tanks;
- Initiate design of H Tank Farm storm water system upgrade; and
- Continue to provide design of waste removal facilities and infrastructure. Construction activities are requested under the National Defense Asset Acquisition appropriation.

Solid Waste System	7,388	1,585	4,404

FY 1996
- Completed construction of TRU Waste Retrieval Project; and
- Completed construction of New Solvent Storage Tanks.

FY 1997 and FY 1998
- No new facilities initiated or completed.

Subtotal, New Facilities	78,826	52,600	18,659

III. Performance Summary - Accomplishments: Savannah River (cont'd)

	FY 1996	FY 1997	FY 1998
DEFENSE WASTE PROCESSING FACILITY (DWPF)			

Provides funding for the management, operations, and maintenance costs for DWPF at SRS, which will ultimately treat all of the 34 million gallons of HLW stored in 51 underground tanks at SR in the DWPF vitrification facility and Saltstone Grout facility.

FY 1996
- Started DWPF on sludge feed, produced 64 radioactive canisters;
- Disposed of 4 million gallons of saltstone grout; and
- Commenced startup testing of Late Wash Facility.

FY 1997
- Increase production to 180 canisters at DWPF (includes additional 30 cans from $8 million Congressional funding increase in the final Appropriation);
- Dispose of 170,000 gallons of Saltstone grout;
- Complete startup testing of the Salt Process Cell at DWPF and Late Wash Facility; and
- Complete construction of Late Wash Facility.

FY 1998
- Produce 125 to 200 canisters at DWPF;
- Dispose of 6 million gallons of saltstone grout; and
- Commence salt cell and Late Wash operations to process precipitate at DWPF.

Subtotal, DWPF	197,422	156,142	166,741
TOTAL, Savannah River Operations Office	$582,302	$486,696	$446,389

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998: Savannah River (cont'd)

FACILITY OPERATIONS AND MAINTENANCE ($16,965)

High-Level Waste
- Decrease reflects reduced CIF operations to minimal to support DWPF.

Solid Waste
- Decrease is related to the completion of the M Area Vitrification Project offset by increases due to initiation of Waste Financial Accountability System, instituting a waste generator charge-back to fund waste management activities; and increase TRU retrieval and mixed waste activities.

NEW FACILITIES ($33,941)

High-Level Waste
- Overall decrease is due to transfer of CIF to operations; increase in waste removal activities to support processing at ITP and ESP for increasing DWPF production in the outyears; Complete construction of RHLWE; and transfer of construction funding request to the National Defense Asset Acquisition appropriation.

DEFENSE WASTE PROCESSING FACILITY $10,599
- Increase is due to start up precipitate processing through Late Wash and the Salt Process Cell at DWPF, a potential increase in canister production to 200, and an increase in Saltstone operations coincident with resumption of operations at ITP.

HEADQUARTERS

I. Mission Supporting Goals and Objectives

Headquarters role is to establish national program priorities for the Waste Management program. To achieve this, strategic planning, budget development and analysis, and policy development are performed. Headquarters establishes priorities and goals for the program, and then measures and analyzes progress to assure Waste Management is achieving its mission.

II. Funding Schedule

Program Activity	FY 1996	FY 1997	FY 1998	$ Change	% Change
Program Management	$ 54,842	$ 6,575	$ 6,046	-529	-8%
TOTAL, Headquarters	$ 54,842	$ 6,575	$ 6,046	-529	-8%

III. Performance Summary - Accomplishments:

	FY 1996	FY 1997	FY 1998
PROGRAM MANAGEMENT			
- In FY 1996, provided salaries, expenses, travel, and training of Headquarters Federal employees. In FY 1997 and FY 1998, these funds are requested under a newly established Program Direction account.	$ 13,591	$ 0	$ 0
- In FY 1996, provided for general and technical support services. In FY 1997, these services were requested under the newly established Program Direction account.	12,255	0	0
- In FY 1996, provided for DOE-wide waste minimization policy development and planning and unique return-on-investment demonstration projects. In FY 1997, Waste Minimization was transferred to the Office of Nuclear Material and Facility Stabilization.	10,800	0	0

III. Performance Summary - Accomplishments: Headquarters (cont'd)

	FY 1996	FY 1997	FY 1998
- Provide for environmental stewardship program through United Negro College Fund.	0	332	0
- Continue implementation of DNFSB Recommendation 94-2 on performance assessments of low-level radioactive waste disposal and conduct analyses of other major regulatory issues that will impact the cost and schedule of the Waste Management Program.	3,962	1,108	791
- Continue integrated planning efforts and cross-cutting analyses to identify opportunities to reduce risk and long-term mortgages associated with treatment and disposal of backlog waste.	1,690	800	738
- Provide cost analysis of storage, treatment, and disposal activities for various waste types across the DOE complex to recommend efficiencies and reduce cost.	750	250	222
- Continued to work with States and the Environmental Protection Agency to implement mixed waste treatment strategy using carryover funds.	436	0	0
- In conjunction with the Nuclear Regulatory Commission, recover and store a limited number of neutron sources from the commercial sector for which DOE is responsible.	0	0	975
- Reimburse the Environmental Protection Agency for the cost of annual Resource Conservation and Recovery Act inspections at DOE facilities that treat, store, or dispose of hazardous waste, required by Section 104 of the Federal Facility Compliance Act of 1992.	0	0	440
- Provide privatization support including training, financial, and feasibility analysis, lessons learned, and interactive workshops between field and Headquarters.	400	250	240
- Continue development of the Waste Management portion of the Environmental Management Ten-Year Plan and implementation of the Integrated Strategic Planning, Budgeting, and Management System (ISPBMS) including independent analyses by the Corps of Engineers; continue to work with sites to identify and resolve configuration integration issues, and develop Records of Decision following issuance of the Waste Management Programmatic Environmental Impact Statement; conduct analysis and coordinate with the Office of Science and Technology on new beneficial technologies that will reduce the risk and cost of waste management operations; participate in external oversight committees of the National Academy of Sciences and the EM Advisory Board; participate in technical conferences and international committees and technical exchanges that benefit the Waste Management program.	7,958	3,835	2,640

III. Performance Summary - Accomplishments: Headquarters (cont'd)

	FY 1996	FY 1997	FY 1998
- Funded National Institute on Environmental Health and Safety (HAZWOPER) training. In FY 1997 and FY 1998, these funds are requested by the Office of Nuclear Material and Facility Stabilization.	3,000	0	0
TOTAL, Headquarters Office	$54,842	$6,575	$6,046

EXPLANATION OF FUNDING CHANGES FROM FY 1997 TO FY 1998:

Headquarters: Decreases will occur in areas of day-to-day operations support and analysis and reduced requirements for technical assistance for DNFSB 94-2 Implementation Plan.	($529)

	FY 1996	FY 1997	FY 1998
TOTAL Waste Management - Defense	**$2,412,098**	**$1,581,447**	**$1,455,576**

DEPARTMENT OF ENERGY
FY 1998 CONGRESSIONAL BUDGET REQUEST
DEFENSE ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT
(Tabular dollars in thousands, narrative in whole dollars)

WASTE MANAGEMENT - DEFENSE

CAPITAL OPERATING EXPENSES & CONSTRUCTION SUMMARY

Capital Project Summary Listing:

		FY 1996	FY 1997	FY 1998	$ Change	% Change
Operating and Maintenance						
General Plant Projects		$33,771	$13,794	$15,075	-1,281	+9%
Capital Equipment		86,597	45,879	45,093	-786	-2%
Project Related Costs						
1. CDRs	8,113	12,000	10,000	-2,000	-17%	
2. "Bridge" Costs		0	0	0	0	0%

3.A. Construction Project Summary:

Project No.	Project Title	TEC	Previous Obligations	FY 1996 Approp.		FY 1997 Approp	FY 1998 Request [e/]	Unapprop Balance [e/]
97-D-402	Tank Farm Restoration and Safe Operations, RL	206,000	0	0		7,584	0	0
96-D-406	Spent Nuclear Fuels Canister Storage and Stabilization Facility, RL	43,000	0	43,000	a/	0	0	0
96-D-407	Mixed Waste Low-Level Waste Treatment Project, RF	28,600	0	2,900	b/	0	0	0
96-D-408	Waste Management Upgrades, Various Locations	29,570	0	5,615		11,246	0	0

WASTE MANAGEMENT - DEFENSE - CAPITAL OPERATING EXPENSES & CONSTRUCTION SUMMARY (cont'd)

Capital Project Summary Listing:

3.A. Construction Project Summary:

Project No.	Project Title	TEC	Previous Obligations	FY 1996 Approp.	FY 1997 Approp	FY 1998 Request [e/]	Unapprop Balance [e/]
95-D-402	Install Permanent Electrical Service, WIPP, AL	5,942	700	4,314	752	0	0
95-D-405	Industrial Landfill V and Construction/ Demolition Landfill VII, Y-12 Plant, OR	9,600	1,000	4,600	200	0	0
95-D-406	Road 5-01 Reconstruction, Area 5, NV	3,361	2,338	1,023	0	0	0
95-D-407	219-S Secondary Containment Upgrade, RL	5,100	1,600	1,000	0	0	0
94-D-400	High Explosive Wastewater Treatment System, LANL	6,445	2,000	4,445	0	0	0
94-D-402	Liquid Waste Treatment System, NTS	5,688	5,406	282	0	0	0
94-D-404	Melton Valley Storage Tank Capacity Increase, ORNL	48,000	29,436	11,000	6,345	0	0
94-D-407	Initial Tank Retrieval Systems, RL	205,380	1,000	12,000	12,600	0	0
94-D-411	Solid Waste Operation Complex, RL	47,479	40,873	6,606	0	0	0
93-D-178	Building 374 Liquid Waste Treatment Facility, RF	32,700	2,700	3,900	0	0	0
93-D-181	Radioactive Liquid Waste Line Replacement, RL	11,416	6,416	5,000	0	0	0
93-D-182	Replacement of Cross-Site Transfer System, RL	47,200	19,305	19,795	8,100	0	0

WASTE MANAGEMENT - DEFENSE - CAPITAL OPERATING EXPENSES & CONSTRUCTION SUMMARY (cont'd)

Capital Project Summary Listing:

3.A. Construction Project Summary:

Project No.	Project Title	TEC	Previous Obligations	FY 1996 Approp.	FY 1997 Approp	FY 1998 Request [e/]	Remaining balance [e/]
93-D-187	High-Level Waste Removal from Filled Waste Tanks, SR	558,050	193,095	19,700	20,000	0	0
92-D-171	Mixed Waste Receiving and Storage Facility, LANL	3,170	2,895	275	0	0	0
92-D-172	Hazardous Waste Treatment and Processing Facility, Pantex Plant, AL	6,000	1,000	0	0	0	0
92-D-188	Waste Management ES&H and Compliance Activities, Various Locations	34,200	28,003	6,197	0	0	0
92-D-403	Tank Upgrades Project, LLNL	17,684	17,584	100	0	0	0
91-D-171	Waste Receiving and Processing Facility Module 1, RL	53,992	53,595	397	0	0	0
91-D-172	High-Level Waste Tank Farm Replacement, Idaho Chemical Processing Plant, INEL, ID	61,530	57,530	4,000	0	0	0
90-D-172	Aging Waste Transfer Line, RL	10,470	9,000	1,470	0	0	0
90-D-177	RWMC Transuranic Waste Characterization and Storage Facility, ID	104,500	103,072	1,428	0	0	0
90-D-178	TSA Retrieval Enclosure, ID	51,200	48,594	2,606	0	0	0
89-D-173	Tank Farm Ventilation Upgrade, RL	27,400	23,800	800	2,800	0	0
89-D-174	Replacement High-Level Waste Evaporator, SR	118,024	93,982	11,500	11,500	0	0
88-D-173	Hanford Waste Vitrification Plant, RL	1,210,000	286,335	530 [d/]	0	0	0
86-D-103	Decontamination and Waste Treatment Facility, LLNL, CA	68,005	25,547	8,885	10,000	0	0
83-D-148	Non-Radioactive Hazardous Waste Management (CIF), SR	96,406	89,918	6,488	0	0	0
	Subtotal, Construction Funded	N/A	$1,146,724	$ 189,856	$ 91,127	$ 0 [e/]	0 [e/]

WASTE MANAGEMENT - DEFENSE - CAPITAL OPERATING EXPENSES & CONSTRUCTION SUMMARY (cont'd)

Project No.	Project Title	TEC	Previous Obligations	FY 1996 Approp.	FY 1997 Approp	FY 1998 Request [e/]	Remaining balance [e/]
3.B. Operating Expense Funded:							
	Defense Waste Processing Facility, Saltstone Vault #2, SR	$ 11,703	$ 903	$ 0	$ 0	$ 3,077	$ 7,723
	Expedited Technology Demonstration Project, LLNL, CA c/	25,894	16,936	11,311	2,000	2,000	0
	Tank 241-C-106 Sluicing, RL	47,212	16,700	30,400	112	0	0
	Cap and Roof for Saltstone Vault #1, SR	2,636	0	1,636	0	0	1,000
	Subtotal, Operating Expense Funded		$ 34,539	$ 43,337	$ 2,112	$ 5,077	$ 8,723
TOTAL, Waste Management - Defense		N/A	$1,181,263	$233,203	$93,239	$ 5,077	$ 8,723

a/ Project No. 96-D-406 transferred to the Office of Nuclear Material and Facility Stabilization.
b/ Project No. 96-D-407 transferred to the Office of Environmental Restoration in FY 1997.
c/ Reflects new name for Mixed Waste Management Facility, approved November 1996.
d/ Project canceled in FY 1996.
e/ Reflects full-funding requested in the National Defense Asset Acquisition Appropriation.